

Nationwide House Energy Rating Scheme* — Class 2 summary



Certificate Number: **OMAX4RX4SR**

Date of Certificate: **6 Jun 2019**

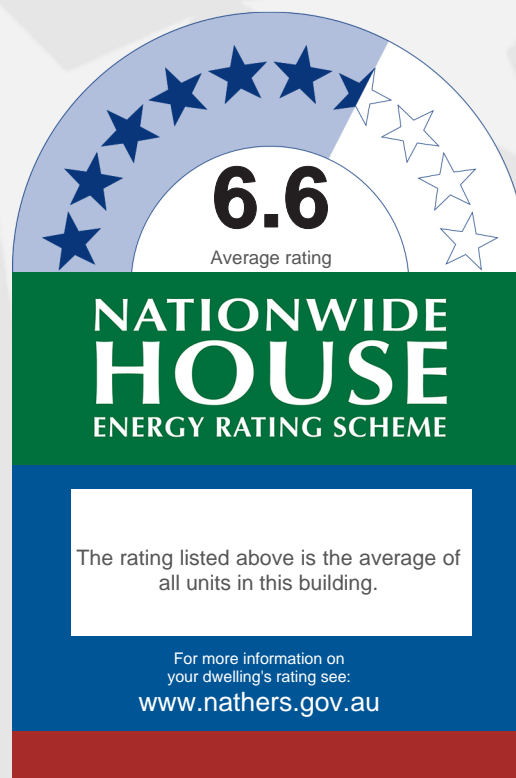
★ Average star rating: **6.6**

Assessor details

Accreditation number: **VIC/BDAV/14/1658**
Name: **Duncan Hope**
Organisation: **Senica Consultancy Group**
Email: **duncan@senica.com.au**
Phone: **61280067784**
Declaration of interest: **Employed by organisation constructing the building**
Software: **FirstRate5 v5.2.10b**
AAO: **BDAV**

Dwelling details

Address: **26 Whistler Street**
Suburb: **MANLY**
State: **NSW**
Postcode: **2095**



Summary of all dwellings

Certification details

Certificate number	Unit number	Annual thermal performance loads (MJ/m2)			Star rating
		Heating load	Cooling load	Total load	
IB97S9GUWI	102	38.1	18.1	56.2	5.6
66BVWOLYT8	102	44.2	11.4	55.6	5.7
R5RY8MPGRX	103	33.2	20.5	53.7	5.8
G4LZG9E5U7	104	43.6	18.7	62.3	5.2
EV8KUAVVOH	105	12	16.3	28.3	7.8
YIUA6AOMWJ	106	34.7	19.7	54.4	5.8
PEOL931SYU	107	30.3	17.3	47.6	6.3
Q7AT0WRPAC	108	34.9	23	57.9	5.5
VGRKLUYD0Z	201	15.3	16.4	31.7	7.5
5XUICYZTLM	202	16.6	22.5	39.1	6.9
TVF7GJYSWT	203	11.6	23.2	34.8	7.3
NPNC9JWD9O	204	24.4	21.5	45.9	6.4
FX18Y2N1RB	205	13.5	14.6	28.1	7.8
78DYSAAUDC	206	38.1	20.3	58.4	5.4
6FQHMQKRJ3	207	33.6	16.8	50.4	6.1
CVT6H53GIO	208	22.5	26.2	48.7	6.2

continued

Nationwide House Energy Rating Scheme* — Class 2 summary

Certificate Number: **OMAX4RX4SR**

Date of Certificate: **6 Jun 2019**

★ Average star rating: **6.6**



Summary of all dwellings continued

Certification details continued

Certificate number	Unit number	Annual thermal performance loads (MJ/m2)			Star rating
		Heating load	Cooling load	Total load	
80KFNFQZAZ	301	22.6	29.3	51.9	5.9
TQ57SCWA33	302	16.6	18.4	35	7.3
W27XLFKWM0	303	18.5	19.4	37.9	7.1
142J98JK3F	304	25.7	20.2	45.9	6.4
V2JL89NDSH	305	13.2	14	27.2	7.9
190ZKLZVE9	306	35.4	16.3	51.7	5.9
EHIXSEM764	307	23.9	24.6	48.5	6.2
DPRV7CCY0F	401	7.3	20.8	28.1	7.8
S3Y6YQA67W	402	19.9	28.6	48.5	6.2
ZOO3BNTV23	403	24.7	21.4	46.1	6.4
WQGYD43H8J	404	13.8	13.3	27.1	7.9
KK36MNI569	405	36.6	15.7	52.3	5.9
KUE1QLSM9C	406	24.9	24	48.9	6.2
Y8KDINLL2G	501	17.3	17	34.3	7.3
OGYYM4AWRW	502	28.8	15.6	44.4	6.6
9DR1S65W1Z	503	18.7	21.7	40.4	6.9
FVFK03DJOU	504	20.6	14.9	35.5	7.3
DNG78LA1QZ	601	15.5	20.3	35.8	7.2
JVPHUSFE8L	602	16	21.5	37.5	7.1
MZC4F2AO8S	603	19.2	22	41.2	6.8
5EGBPTG8ZH	604	28.3	15	43.3	6.6
E7FH4EBFOJ	701	24.6	19.6	44.2	6.6
NQ2EQSHOY1	702	28.6	21	49.6	6.1
65UQBBQG9S	703	21.5	12.2	33.7	7.4
KL95VSNNH0	704	36.8	15.1	51.9	5.9

This building achieves an average star rating of: **6.6**

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **5EGBPTG8ZH**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.6**



Assessor details

Accreditation number: **VIC/BDAV/14/1658**
Name: **Duncan Hope**
Organisation: **Senica Consultancy Group**
Email: **duncan@senica.com.au**
Phone: **61280067784**
Declaration of interest: **Employed by organisation constructing the building**
Software: **FirstRate5: 5.2.10b (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **604, 26 Whistler Street**
Suburb: **MANLY**
State: **NSW** Postcode: **2095**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **56**
Exposure: **open**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Insulation: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Glazing: **As indicated**
As indicated

Net floor area (m²)

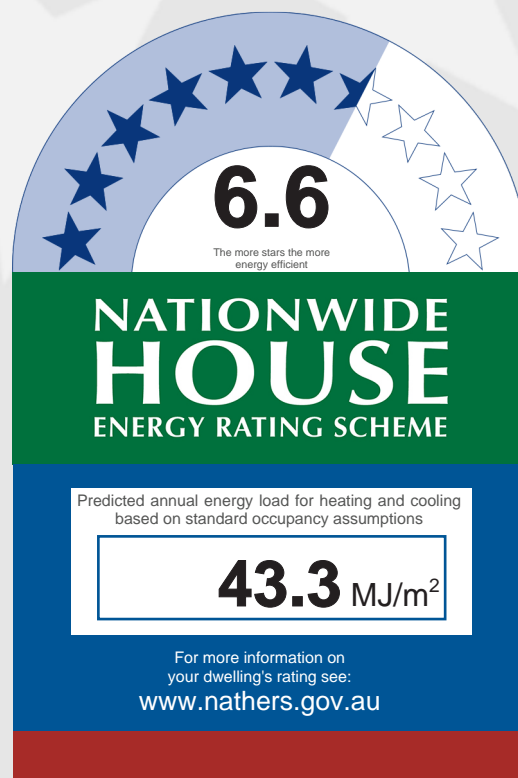
Conditioned: **105**
Unconditioned: **4.4**
Garage: **-**
TOTAL: **109.4**

Annual thermal performance loads (MJ/m²)

Heating: **28.3**
Cooling: **15**
TOTAL: **43.3**

Plan documents

Plan ref/date: **Project No. 21813**
Prepared by: **Wolski Coppin Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **0**
Unsealed: **0**
TOTAL:** **0**

Principal downlight type: **Compact fluorescent**

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

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<https://www.fr5.com.au/QRCodeLandIng?PublicId=5EGBPTG8ZH>

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 5EGBPTG8ZH

Date of Certificate: 6 Jun 2019

★ Star rating: 6.6



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	Opening 69	2100	678	ESE	Bedroom 1	No
ALM-002-01 A	Opening 67	2100	2967	SSW	Bedroom 1	No
ALM-002-01 A	Opening 86	2100	1160	SSW	Bedroom 1	No
ALM-002-01 A	Opening 70	2100	1800	SSW	Bedroom 2	No
ALM-002-01 A	Opening 71	2100	1500	ESE	Bedroom 2	No
ALM-002-01 A	Opening 66	2100	400	WNW	Bedroom 3	No
ALM-002-01 A	Opening 65	2100	1200	SSW	Bedroom 3	No
ALM-002-01 A	Opening 68	2100	400	WNW	Ensuite 1	No
ALM-002-01 A	Opening 85	2100	1502	SSW	Ensuite 1	No
ALM-002-01 A	Opening 72	2100	820	SSW	Kitchen/Living	No
ALM-002-01 A	Opening 74	2100	3660	ESE	Kitchen/Living	No
ALM-002-01 A	Opening 75	2100	922	NNE	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	5.6	ESE	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	11.4	SSW	Bedroom 1	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	SSW	Bedroom 2	Yes	Yes

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **5EGBPTG8ZH**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.6**



Building Features

1 : AFS - AFS 162mm (75mm Glasswool)	9.5	ESE	Bedroom 2	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	9.8	WNW	Bedroom 3	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	3.4	SSW	Bedroom 3	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	0.8	NNE	Bedroom 3	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.2	WNW	Ensuite 1	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	0.8	SSW	Ensuite 1	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	1.5	WNW	Ensuite 1	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.2	SSW	Ensuite 1	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	3.3	WNW	Bath	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	6.6	NNE	Bath	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	1.1	WNW	Entry	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	0.8	SSW	Entry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.3	WNW	Entry	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	3.1	SSW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	11.3	ESE	Kitchen/Living	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	9.7	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	12.5	NNE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.5	WNW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	0.5	NNE	Kitchen/Living	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	92.4	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 150mm concrete slab Lined	14.9	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 150mm concrete slab Lined	15.8	Enclosed	R0.0	Carpet
Bedroom 3	FR5 - 150mm concrete slab Lined	13.6	Enclosed	R0.0	Carpet
Ensuite 2	FR5 - 150mm concrete slab Lined	3.4	Enclosed	R0.0	Tiles
Ensuite 1	FR5 - 150mm concrete slab Lined	4.8	Enclosed	R0.0	Tiles
Hallway	FR5 - 150mm concrete slab Lined	4.1	Enclosed	R0.0	Tiles
Bath	FR5 - 150mm concrete slab Lined	4.4	Enclosed	R0.0	Tiles
Entry	FR5 - 150mm concrete slab Lined	3.5	Enclosed	R0.0	Tiles

Nationwide House Energy Rating Scheme* Certificate



Certificate Number: **5EGBPTG8ZH**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.6**

Building Features

Kitchen/Living FR5 - 150mm concrete slab Lined 45 Enclosed R0.0 Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **5EGBPTG8ZH**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.6**



Additional information

Explanatory notes

About this report

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

General Information

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

Accredited Assessors

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

Disclaimer

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

Contact

For more information on the Nationwide House Energy Rating Scheme (NatHERS), visit www.nathers.gov.au

For more information on energy efficient design and insulation visit www.yourhome.gov.au

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 5XUICYZTLM

Date of Certificate: 6 Jun 2019

★ Star rating: 6.9



Assessor details

Accreditation number: VIC/BDAV/14/1658
Name: Duncan Hope
Organisation: Senica Consultancy Group
Email: duncan@senica.com.au
Phone: 61280067784
Declaration of interest: Employed by organisation constructing the building
Software: FirstRate5: 5.2.10b (3.13)
AAO: BDAV

Overview

Dwelling details

Address: 202, 26 Whistler Street
Suburb: MANLY
State: NSW Postcode: 2095
Type: New Home NCC Class: Class 2
Lot/DP number: - NatHERS climate zone: 56
Exposure: suburban

Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated
Roof: As indicated
Floor: As indicated
Insulation: Wall: As indicated
Roof: As indicated
Floor: As indicated
Glazing: As indicated
As indicated

Net floor area (m²)

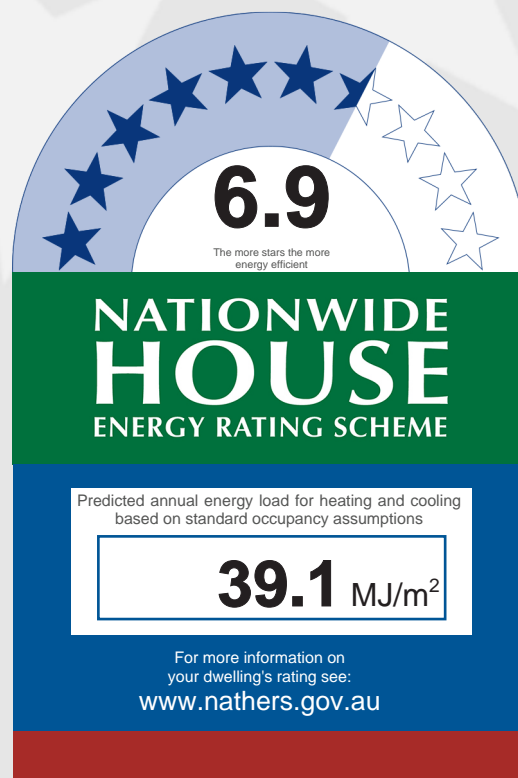
Conditioned: 84.4
Unconditioned: 1.8
Garage: -
TOTAL: 86.2

Annual thermal performance loads (MJ/m²)

Heating: 16.6
Cooling: 22.5
TOTAL: 39.1

Plan documents

Plan ref/date: Project No. 21813
Prepared by: Wolski Coppin Architecture



Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL:** 0

Principal downlight type: Compact fluorescent

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 5XUICYZTLM

Date of Certificate: 6 Jun 2019

★ Star rating: 6.9



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	bae 1	2100	1600	WNW	Bedroom 1	No
ALM-002-01 A	bad 2	2100	2620	WNW	Bedroom 2	No
ALM-002-01 A	balcony	2100	2700	NNE	Kitchen/Living	No
ALM-002-01 A	living	2100	1800	WNW	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	1.4	WNW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.7	NNE	Bedroom 1	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	4.4	WNW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.7	SSW	Bedroom 1	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	2.1	WNW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	9.5	SSW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	10.2	NNE	Bedroom 2	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.9	WNW	Bedroom 2	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	7.9	ESE	Bedroom 2	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.8	SSW	bath	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.8	NNE	laundry	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **5XUICYZTLM**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.9**



Building Features

1 : AFS - AFS 200mm (75mm Glasswool)	3.4	SSW	laundry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.8	ESE	laundry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	4.1	ESE	entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	14.5	SSW	Hall way	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.6	ESE	Hall way	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	6.4	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.5	WNW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.8	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	2.4	WNW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.6	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5	WNW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.7	SSW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	2.7	WNW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	1.4	ESE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	8.6	NNE	study	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.7	SSW	study	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	4.7	ESE	study	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	96.8	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 150mm concrete slab	10.6	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 150mm concrete slab	11	Enclosed	R0.0	Carpet
ensuite	FR5 - 150mm concrete slab	3.3	Enclosed	R0.0	Tiles
dressing	FR5 - 150mm concrete slab	3.6	Enclosed	R0.0	Carpet
bath	FR5 - 150mm concrete slab	3.5	Enclosed	R0.0	Tiles
laundry	FR5 - 150mm concrete slab	1.8	Enclosed	R0.0	Tiles
entry	FR5 - 150mm concrete slab	4.2	Enclosed	R0.0	Tiles
Hall way	FR5 - 150mm concrete slab	7.2	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 150mm concrete slab	34.6	Enclosed	R0.0	Tiles
study	FR5 - 150mm concrete slab	6.3	Enclosed	R0.0	Carpet

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 5XUICYZTLM

Date of Certificate: 6 Jun 2019

★ Star rating: 6.9



Building Features

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 5XUICYZTLM

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Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 6FQHMQRJ3

Date of Certificate: 6 Jun 2019

★ Star rating: 6.1



Assessor details

Accreditation number: **VIC/BDAV/14/1658**
Name: **Duncan Hope**
Organisation: **Senica Consultancy Group**
Email: **duncan@senica.com.au**
Phone: **61280067784**
Declaration of interest: **Employed by organisation constructing the building**
Software: **FirstRate5: 5.2.10b (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **207, 26 Whistler Street**
Suburb: **MANLY**
State: **NSW** Postcode: **2095**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **56**
Exposure: **suburban**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Insulation: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Glazing: **As indicated**
As indicated

Net floor area (m²)

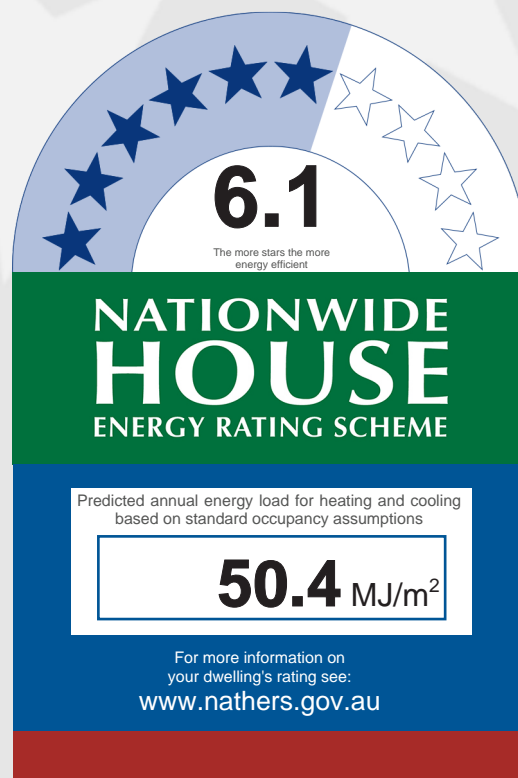
Conditioned: **72.5**
Unconditioned: **4.1**
Garage: **-**
TOTAL: **76.6**

Annual thermal performance loads (MJ/m²)

Heating: **33.6**
Cooling: **16.8**
TOTAL: **50.4**

Plan documents

Plan ref/date: **Project No. 21813**
Prepared by: **Wolski Coppin Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **0**
Unsealed: **0**
TOTAL:** **0**

Principal downlight type: **Compact fluorescent**

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 6FQHMQRJ3

Date of Certificate: 6 Jun 2019

★ Star rating: 6.1



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	21.12SD	2100	1200	ESE	Bedroom 1	No
ALM-002-01 A	Opening 9	1500	3000	ESE	Bedroom 2	No
ALM-002-01 A	21.36SD	2100	3600	ESE	Kitchen/Living	No
ALM-002-01 A	Opening 10	1500	1200	NNE	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	1.7	SSW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.7	SSW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.6	ESE	Bedroom 1	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	0.4	WNW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	8.7	WNW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.6	ESE	Bedroom 2	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	2.1	NNE	Bedroom 2	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	5.9	SSW	Bedroom 2	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.4	WNW	Ensuite	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.3	SSW	Ensuite	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3	SSW	Kitchen/Living	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 6FQHMQRJ3

Date of Certificate: 6 Jun 2019

★ Star rating: 6.1



Building Features

1 : AFS - AFS 200mm (75mm Glasswool)	10	ESE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	18.9	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	1.2	WNW	Bathroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.8	NNE	Bathroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.6	WNW	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	10.9	SSW	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.4	WNW	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.8	SSW	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	2.4	NNE	Entry	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.6	WNW	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.1	NNE	Entry	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	49.5	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 125mm concrete slab	13.6	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 125mm concrete slab	11.2	Enclosed	R0.0	Tiles
Ensuite	FR5 - 125mm concrete slab	3.1	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 125mm concrete slab	34.5	Enclosed	R0.0	Tiles
Bathroom	FR5 - 125mm concrete slab	4.1	Enclosed	R0.0	Tiles
Entry	FR5 - 125mm concrete slab	10.1	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Nationwide House Energy Rating Scheme* Certificate



Certificate Number: **6FQHMQRJ3**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.1**

Building Features

Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 125mm: 125mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 6FQHMQRJ3

Date of Certificate: 6 Jun 2019

★ Star rating: 6.1



Additional information

Explanatory notes

About this report

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General Information

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 9DR1S65W1Z

Date of Certificate: 6 Jun 2019

★ Star rating: 6.9



Assessor details

Accreditation number: VIC/BDAV/14/1658
Name: Duncan Hope
Organisation: Senica Consultancy Group
Email: duncan@senica.com.au
Phone: 61280067784
Declaration of interest: Employed by organisation constructing the building
Software: FirstRate5: 5.2.10b (3.13)
AAO: BDAV

Overview

Dwelling details

Address: 503, 26 Whistler Street
Suburb: MANLY
State: NSW Postcode: 2095
Type: New Home NCC Class: Class 2
Lot/DP number: - NatHERS climate zone: 56
Exposure: open

Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated
Roof: As indicated
Floor: As indicated
Insulation: Wall: As indicated
Roof: As indicated
Floor: As indicated
Glazing: As indicated
As indicated

Net floor area (m²)

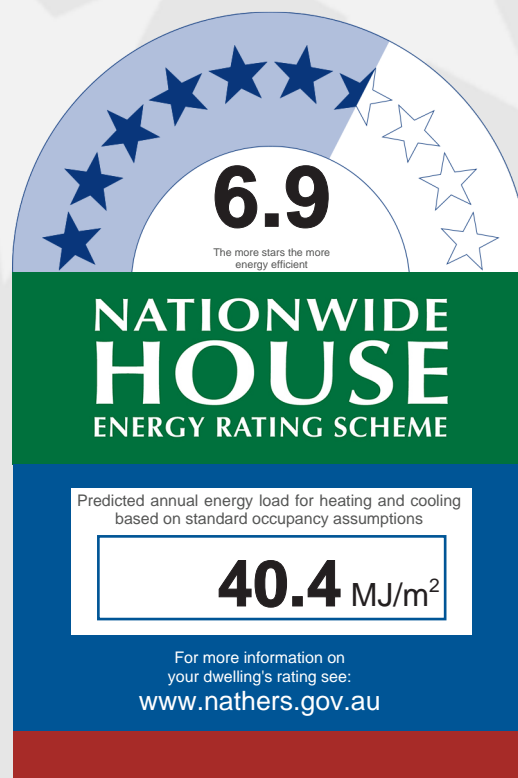
Conditioned: 118.8
Unconditioned: 7.4
Garage: -
TOTAL: 126.2

Annual thermal performance loads (MJ/m²)

Heating: 18.7
Cooling: 21.7
TOTAL: 40.4

Plan documents

Plan ref/date: Project No. 21813
Prepared by: Wolski Coppin Architecture



Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL:** 0

Principal downlight type: Compact fluorescent

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **9DR1S65W1Z**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.9**



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	bed 1 door	2100	920	NNE	Bedroom 1	No
ALM-002-01 A	bed 1	2100	1500	NNE	Bedroom 1	No
ALM-002-01 A	bed 2	2100	1300	ESE	Bedroom 2	No
ALM-002-01 A	bed 3	2100	1250	ESE	Bedroom 3	No
ALM-002-01 A	Opening 32	2100	2000	ESE	Kitchen/Living	No
ALM-002-01 A	lkitchen	2100	2473	NNE	Kitchen/Living	No
ALM-002-01 A	dining	2100	2750	ESE	Kitchen/Living	No
ALM-002-01 A	balcony	2100	4000	NNE	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	9.2	WNW	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.9	NNE	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.7	NNE	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	6	WNW	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	12.2	SSW	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	ESE	Bedroom 2	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	8.2	SSW	Bedroom 3	Yes	Yes

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **9DR1S65W1Z**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.9**



Building Features

1 : AFS - AFS 162mm (75mm Glasswool)	6.1	ESE	Bedroom 3	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	1.5	NNE	Bedroom 3	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.9	ESE	Bedroom 3	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	8.3	WNW	ensuite 1	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	0.8	SSW	ensuite 1	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	5	WNW	bath	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.6	SSW	bath	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	0.7	NNE	bath	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.6	SSW	laundry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.9	WNW	entry	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	11.8	ESE	Kitchen/Living	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.5	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	7.5	ESE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	11	NNE	Kitchen/Living	Yes	Yes

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	100.9	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 150mm concrete slab	18.2	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 150mm concrete slab	18.2	Enclosed	R0.0	Tiles
Bedroom 3	FR5 - 150mm concrete slab	15.3	Enclosed	R0.0	Tiles
ensuite 1	FR5 - 150mm concrete slab	7.3	Enclosed	R0.0	Tiles
bath	FR5 - 150mm concrete slab	4	Enclosed	R0.0	Tiles
laundry	FR5 - 150mm concrete slab	3.4	Enclosed	R0.0	Tiles
entry	FR5 - 150mm concrete slab	10.9	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 150mm concrete slab	48.8	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **9DR1S65W1Z**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.9**



Building Features

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **9DR1S65W1Z**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.9**



Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 65UQBBQG9S

Date of Certificate: 6 Jun 2019

★ Star rating: 7.4



Assessor details

Accreditation number: VIC/BDAV/14/1658
Name: Duncan Hope
Organisation: Senica Consultancy Group
Email: duncan@senica.com.au
Phone: 61280067784
Declaration of interest: Employed by organisation constructing the building
Software: FirstRate5: 5.2.10b (3.13)
AAO: BDAV

Overview

Dwelling details

Address: 703, 26 Whistler Street
Suburb: MANLY
State: NSW Postcode: 2095
Type: New Home NCC Class: Class 2
Lot/DP number: - NatHERS climate zone: 56
Exposure: open

Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated
Roof: As indicated
Floor: As indicated
Insulation: Wall: As indicated
Roof: As indicated
Floor: As indicated
Glazing: As indicated
As indicated

Net floor area (m²)

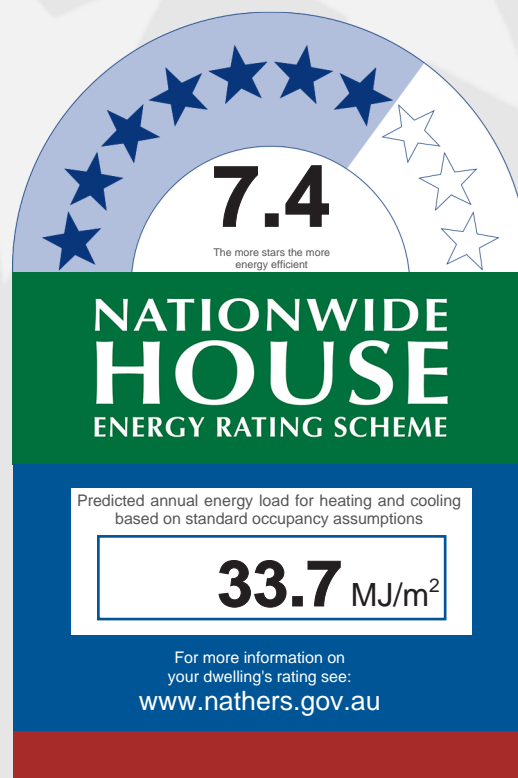
Conditioned: 100.6
Unconditioned: 6.9
Garage: -
TOTAL: 107.5

Annual thermal performance loads (MJ/m²)

Heating: 21.5
Cooling: 12.2
TOTAL: 33.7

Plan documents

Plan ref/date: Project No. 21813
Prepared by: Wolski Coppin Architecture



Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL:** 0

Principal downlight type: Compact fluorescent

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

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Certificate Number: 65UQBBQG9S

Date of Certificate: 6 Jun 2019

★ Star rating: 7.4



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	bed 1 door	2100	920	NNE	Bedroom 1	No
ALM-002-01 A	bed 1	2100	1500	NNE	Bedroom 1	No
ALM-002-01 A	bed 2	2100	1300	ESE	Bedroom 2	No
ALM-002-01 A	Opening 40	2100	1800	SSW	Bedroom 3	No
ALM-002-01 A	bed 3	2100	750	ESE	Bedroom 3	No
ALM-002-01 A	Opening 32	2100	300	ESE	Kitchen/Living	No
ALM-002-01 A	lkitchen	2100	2473	NNE	Kitchen/Living	No
ALM-002-01 A	dining	2100	2750	ESE	Kitchen/Living	No
ALM-002-01 A	balcony	2100	4000	NNE	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
----	---------------------------	------------------------	-------------	-----------	---------------	-----------------------

External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	8.5	WNW	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.1	NNE	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.7	NNE	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	9.6	SSW	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.3	ESE	Bedroom 2	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.9	SSW	Bedroom 3	Yes	Yes

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **65UQBBQG9S**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.4**



Building Features

1 : AFS - AFS 162mm (75mm Glasswool)	8.9	ESE	Bedroom 3	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	6.9	WNW	ensuite 1	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	0.7	SSW	ensuite 1	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	3	WNW	bath	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	0.8	NNE	bath	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	WNW	laundry	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	7.1	SSW	laundry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.8	WNW	entry	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	6.3	ESE	Kitchen/Living	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.5	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	7.5	ESE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	10.8	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.5	WNW	Ensuite 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.3	SSW	Ensuite 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.9	ESE	Ensuite 2	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	93.7	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 150mm concrete slab	16.5	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 150mm concrete slab	16.5	Enclosed	R0.0	Tiles
Bedroom 3	FR5 - 150mm concrete slab	11.1	Enclosed	R0.0	Tiles
ensuite 1	FR5 - 150mm concrete slab	5.9	Enclosed	R0.0	Tiles
bath	FR5 - 150mm concrete slab	2.3	Enclosed	R0.0	Tiles
laundry	FR5 - 150mm concrete slab	4.6	Enclosed	R0.0	Tiles
entry	FR5 - 150mm concrete slab	6.1	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 150mm concrete slab	40.8	Enclosed	R0.0	Tiles
Ensuite 2	FR5 - 125mm concrete slab	3.7	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Nationwide House Energy Rating Scheme* Certificate



Certificate Number: **65UQBBQG9S**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.4**

Building Features

Ensuite 2 Plasterboard R3.0 No

Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium
Slab:Slab - Suspended Slab : 125mm: 125mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 65UQBBQG9S

Date of Certificate: 6 Jun 2019

★ Star rating: 7.4



Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 66BVWOLYT8

Date of Certificate: 6 Jun 2019

★ Star rating: 5.7



Assessor details

Accreditation number: VIC/BDAV/14/1658
Name: Duncan Hope
Organisation: Senica Consultancy Group
Email: duncan@senica.com.au
Phone: 61280067784
Declaration of interest: Employed by organisation constructing the building
Software: FirstRate5: 5.2.10b (3.13)
AAO: BDAV

Overview

Dwelling details

Address: 102, 26 Whistler Street
Suburb: MANLY
State: NSW Postcode: 2095
Type: New Home NCC Class: Class 2
Lot/DP number: - NatHERS climate zone: 56
Exposure: suburban

Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated
Roof: As indicated
Floor: As indicated
Insulation: Wall: As indicated
Roof: As indicated
Floor: As indicated
Glazing: As indicated
As indicated

Net floor area (m²)

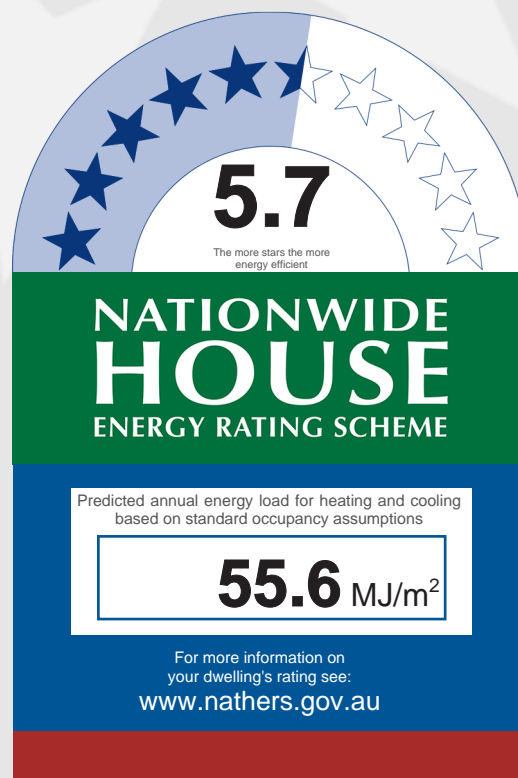
Conditioned: 79.5
Unconditioned: 3.9
Garage: -
TOTAL: 83.4

Annual thermal performance loads (MJ/m²)

Heating: 44.2
Cooling: 11.4
TOTAL: 55.6

Plan documents

Plan ref/date: Project No. 21813
Prepared by: Wolski Coppin Architecture



Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL:** 0

Principal downlight type: Compact fluorescent

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



<https://www.fr5.com.au/QRCodeLand ing?PublicId=66BVWOLYT8>

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 66BVWOLYT8

Date of Certificate: 6 Jun 2019

★ Star rating: 5.7



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	Opening 41	2100	1800	NNE	Bedroom 1	No
ALM-002-01 A	dining	2100	2572	WNW	Kitchen/Living	No
ALM-002-01 A	balcony	2100	2100	NNE	Kitchen/Living	No
ALM-002-01 A	living	2100	1800	WNW	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	8.7	ESE	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.4	NNE	Bedroom 1	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	8.1	ESE	Bedroom 2	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	8.7	NNE	Bedroom 2	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.6	SSW	ensuite	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.2	ESE	ensuite	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	6.5	WNW	bath	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.4	SSW	bath	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	2.5	SSW	entry hall	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	1.2	WNW	entry hall	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	6.9	SSW	entry hall	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 66BVWOLYT8

Date of Certificate: 6 Jun 2019

★ Star rating: 5.7



Building Features

1 : AFS - AFS 200mm (75mm Glasswool)	3.5	ESE	entry hall	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	8.3	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.4	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	7.3	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	2.1	WNW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.6	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	4.9	WNW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.5	SSW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	2.1	WNW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	6.8	SSW	Kitchen/Living	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	9.7	SSW	Kitchen/Living	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	60.7	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 150mm concrete slab	10.2	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 150mm concrete slab	12.2	Enclosed	R0.0	Carpet
ensuite	FR5 - 150mm concrete slab	4.5	Enclosed	R0.0	Tiles
bath	FR5 - 150mm concrete slab	3.9	Enclosed	R0.0	Tiles
entry hall	FR5 - 150mm concrete slab	12.8	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 150mm concrete slab	39.8	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Nationwide House Energy Rating Scheme* Certificate



Certificate Number: **66BVWOLYT8**

Date of Certificate: **6 Jun 2019**

★ Star rating: **5.7**

Building Features

Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 66BVWOLYT8

Date of Certificate: 6 Jun 2019

★ Star rating: 5.7



Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 78DYSAUDC

Date of Certificate: 6 Jun 2019

★ Star rating: 5.4



Assessor details

Accreditation number: VIC/BDAV/14/1658
Name: Duncan Hope
Organisation: Senica Consultancy Group
Email: duncan@senica.com.au
Phone: 61280067784
Declaration of interest: Employed by organisation constructing the building
Software: FirstRate5: 5.2.10b (3.13)
AAO: BDAV

Overview

Dwelling details

Address: 206, 26 Whistler Street
Suburb: MANLY
State: NSW Postcode: 2095
Type: New Home NCC Class: Class 2
Lot/DP number: - NatHERS climate zone: 56
Exposure: suburban

Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated
Roof: As indicated
Floor: As indicated
Insulation: Wall: As indicated
Roof: As indicated
Floor: As indicated
Glazing: As indicated
As indicated

Net floor area (m²)

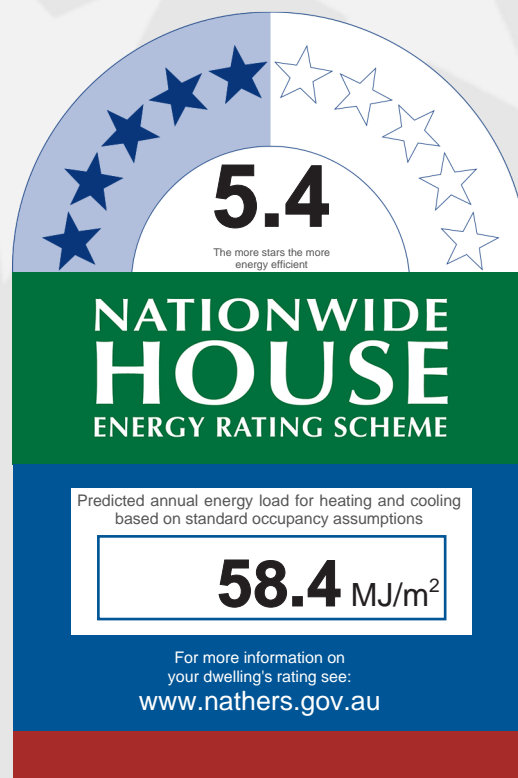
Conditioned: 48.1
Unconditioned: 3.1
Garage: -
TOTAL: 51.2

Annual thermal performance loads (MJ/m²)

Heating: 38.1
Cooling: 20.3
TOTAL: 58.4

Plan documents

Plan ref/date: Project No. 21813
Prepared by: Wolski Coppin Architecture



Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL:** 0

Principal downlight type: Compact fluorescent

NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 78DYSAAUDC

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Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	21.085SW	2100	850	SSW	Bedroom	No
ALM-002-01 A	21.045FW	2100	448	ESE	Bedroom	No
ALM-002-01 A	21.045FW	2100	421	ESE	Bedroom	No
ALM-002-01 A	21.045FW	2100	450	ESE	Bedroom	No
ALM-002-01 A	Opening 9	2100	2810	ESE	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	2.4	SSW	Bedroom	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.7	ESE	Bedroom	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	8.8	NNE	Bedroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.8	WNW	Bedroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	1.3	NNE	Kitchen/Living	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	20	SSW	Kitchen/Living	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.3	ESE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	6.5	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.3	WNW	Bathroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.5	NNE	Bathroom	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **78DYSAAUDC**

Date of Certificate: **6 Jun 2019**

★ Star rating: **5.4**



Building Features

1 : AFS - AFS 200mm (75mm Glasswool)	1.3	ESE	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.8	NNE	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5	WNW	Entry	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	0.6	SSW	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	4.1	WNW	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.1	SSW	Entry	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	26.1	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom	FR5 - 125mm concrete slab	11.1	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 125mm concrete slab	31.5	Enclosed	R0.0	Tiles
Bathroom	FR5 - 125mm concrete slab	3.1	Enclosed	R0.0	Tiles
Entry	FR5 - 125mm concrete slab	5.5	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
----------	--------	---------------

Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 125mm: 125mm Suspended Slab	0.0	medium

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Certificate Number: 78DYSAAUDC

Date of Certificate: 6 Jun 2019

★ Star rating: 5.4



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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 80KFNFQZAZ

Date of Certificate: 6 Jun 2019

★ Star rating: 5.9



Assessor details

Accreditation number: VIC/BDAV/14/1658
Name: Duncan Hope
Organisation: Senica Consultancy Group
Email: duncan@senica.com.au
Phone: 61280067784
Declaration of interest: Employed by organisation constructing the building
Software: FirstRate5: 5.2.10b (3.13)
AAO: BDAV

Overview

Dwelling details

Address: 301, 26 Whistler Street
Suburb: MANLY
State: NSW Postcode: 2095
Type: New Home NCC Class: Class 2
Lot/DP number: - NatHERS climate zone: 56
Exposure: suburban

Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated
Roof: As indicated
Floor: As indicated
Insulation: Wall: As indicated
Roof: As indicated
Floor: As indicated
Glazing: As indicated
As indicated

Net floor area (m²)

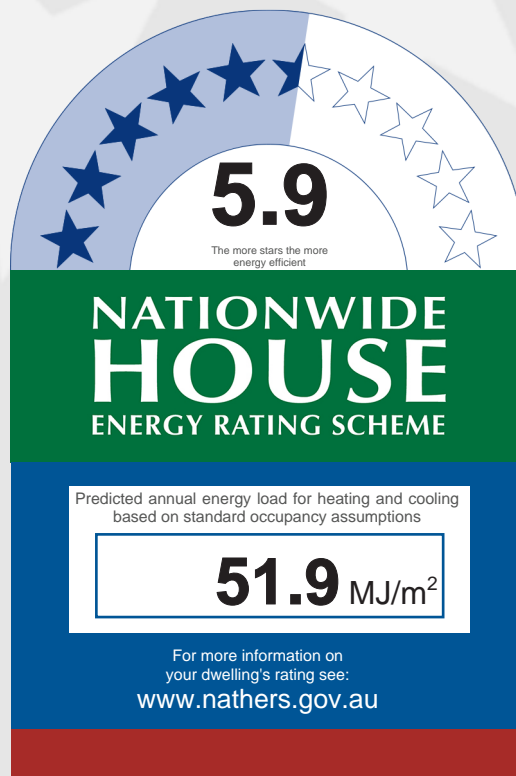
Conditioned: 44.4
Unconditioned: 1.4
Garage: -
TOTAL: 45.8

Annual thermal performance loads (MJ/m²)

Heating: 22.6
Cooling: 29.3
TOTAL: 51.9

Plan documents

Plan ref/date: Project No. 21813
Prepared by: Wolski Coppin Architecture



Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL:** 0

Principal downlight type: Compact fluorescent

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

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Scan to access this certificate online and confirm this is valid.



<https://www.fr5.com.au/QRCodeLand ing?PublicId=80KFNFQZAZ>

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **80KFNFQZAZ**

Date of Certificate: **6 Jun 2019**

★ Star rating: **5.9**



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	bed 1	2100	1800	WNW	Bedroom 1	No
ALM-002-01 A	bed 2	2100	1200	NNE	Bedroom 2	No
ALM-002-01 A	balcony	2100	4280	NNE	Kitchen/Living	No
ALM-002-01 A	dining	2100	2100	WNW	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	6	WNW	Bedroom 1	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	1.3	SSW	Bedroom 1	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.3	SSW	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.5	ESE	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	6	NNE	Bedroom 2	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	1.1	ESE	study	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	0.5	SSW	study	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3	ESE	study	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	3.5	SSW	laundry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.8	ESE	laundry	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	0.5	NNE	laundry	Yes	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 80KFNFQZAZ

Date of Certificate: 6 Jun 2019

★ Star rating: 5.9



Building Features

1 : AFS - AFS 162mm (75mm Glasswool)	4.6	SSW	bath	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.5	SSW	ensuite	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	1.8	ESE	entry hall	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	14.2	NNE	Kitchen/Living	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	10.8	WNW	Kitchen/Living	No	Yes

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	68.1	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 150mm concrete slab	7.5	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 150mm concrete slab	6.1	Enclosed	R0.0	Tiles
study	FR5 - 150mm concrete slab	3.8	Enclosed	R0.0	Tiles
laundry	FR5 - 150mm concrete slab	1.4	Enclosed	R0.0	Tiles
bath	FR5 - 150mm concrete slab	1.8	Enclosed	R0.0	Tiles
ensuite	FR5 - 150mm concrete slab	2.8	Enclosed	R0.0	Tiles
entry hall	FR5 - 150mm concrete slab	3.1	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 150mm concrete slab	19.4	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **80KFNFQZAZ**

Date of Certificate: **6 Jun 2019**

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Additional information

Explanatory notes

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Contact

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 142J98JK3F

Date of Certificate: 6 Jun 2019

★ Star rating: 6.4



Assessor details

Accreditation number: VIC/BDAV/14/1658
Name: Duncan Hope
Organisation: Senica Consultancy Group
Email: duncan@senica.com.au
Phone: 61280067784
Declaration of interest: Employed by organisation constructing the building
Software: FirstRate5: 5.2.10b (3.13)
AAO: BDAV

Overview

Dwelling details

Address: 304, 26 Whistler Street
Suburb: MANLY
State: NSW Postcode: 2095
Type: New Home NCC Class: Class 2
Lot/DP number: - NatHERS climate zone: 56
Exposure: suburban

Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated
Roof: As indicated
Floor: As indicated
Insulation: Wall: As indicated
Roof: As indicated
Floor: As indicated
Glazing: As indicated
As indicated

Net floor area (m²)

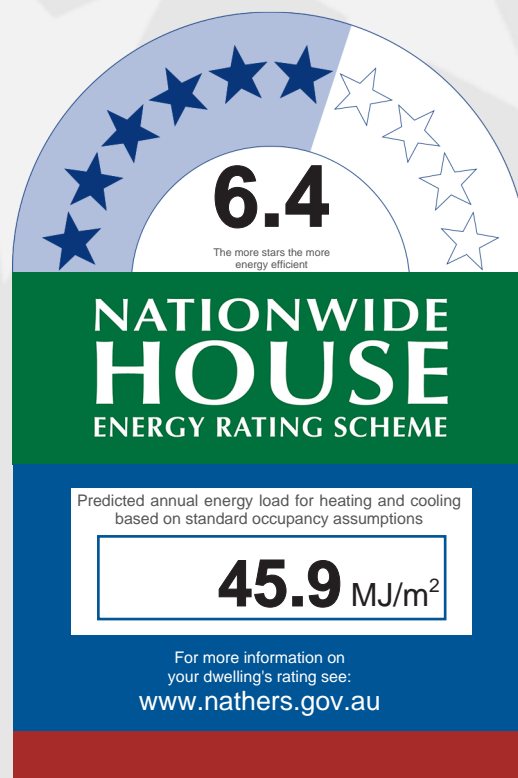
Conditioned: 74.2
Unconditioned: 5.9
Garage: -
TOTAL: 80.1

Annual thermal performance loads (MJ/m²)

Heating: 25.7
Cooling: 20.2
TOTAL: 45.9

Plan documents

Plan ref/date: Project No. 21813
Prepared by: Wolski Coppin Architecture



Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL:** 0

Principal downlight type: Compact fluorescent

NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 142J98JK3F

Date of Certificate: 6 Jun 2019

★ Star rating: 6.4



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	bed 1	2100	600	ESE	Bedroom 1	No
ALM-002-01 A	bed 1	2100	600	ESE	Bedroom 1	No
ALM-002-01 A	bed 2	2100	1600	SSW	Bedroom 2	No
ALM-002-01 A	kitchen	2100	300	WNW	Kitchen/Living	No
ALM-002-01 A	dining	2100	1800	WNW	Kitchen/Living	No
ALM-002-01 A	balcony	2100	2400	SSW	Kitchen/Living	No
ALM-002-01 A	living	2100	2800	WNW	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	8.6	SSW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.3	ESE	Bedroom 1	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.5	NNE	Bedroom 2	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	6.1	SSW	Bedroom 2	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	8.5	ESE	Bedroom 2	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.4	SSW	laundry	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.3	ESE	laundry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	4.6	NNE	laundry	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 142J98JK3F

Date of Certificate: 6 Jun 2019

★ Star rating: 6.4



Building Features

1 : AFS - AFS 200mm (75mm Glasswool)	3.4	WNW	bath	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.7	NNE	bath	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.5	WNW	entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.8	ESE	entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	8.5	WNW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	6.5	SSW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	8	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	9.1	SSW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	19.8	NNE	Kitchen/Living	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	64	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 150mm concrete slab	12.7	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 150mm concrete slab	12	Enclosed	R0.0	Carpet
laundry	FR5 - 150mm concrete slab	2.6	Enclosed	R0.0	Tiles
bath	FR5 - 150mm concrete slab	3.3	Enclosed	R0.0	Tiles
ensuite	FR5 - 150mm concrete slab	3.7	Enclosed	R0.0	Tiles
entry	FR5 - 150mm concrete slab	7.4	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 150mm concrete slab	38.5	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **142J98JK3F**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.4**



Building Features

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 142J98JK3F

Date of Certificate: 6 Jun 2019

★ Star rating: 6.4



Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate



Certificate Number: 190ZKLZVE9

Date of Certificate: 6 Jun 2019

★ Star rating: 5.9

Assessor details

Accreditation number: VIC/BDAV/14/1658
Name: Duncan Hope
Organisation: Senica Consultancy Group
Email: duncan@senica.com.au
Phone: 61280067784
Declaration of interest: Employed by organisation constructing the building
Software: FirstRate5: 5.2.10b (3.13)
AAO: BDAV

Overview

Dwelling details

Address: 306, 26 Whistler Street
Suburb: MANLY
State: NSW Postcode: 2095
Type: New Home NCC Class: Class 2
Lot/DP number: - NatHERS climate zone: 56
Exposure: suburban

Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated
Roof: As indicated
Floor: As indicated
Insulation: Wall: As indicated
Roof: As indicated
Floor: As indicated
Glazing: As indicated
As indicated

Net floor area (m²)

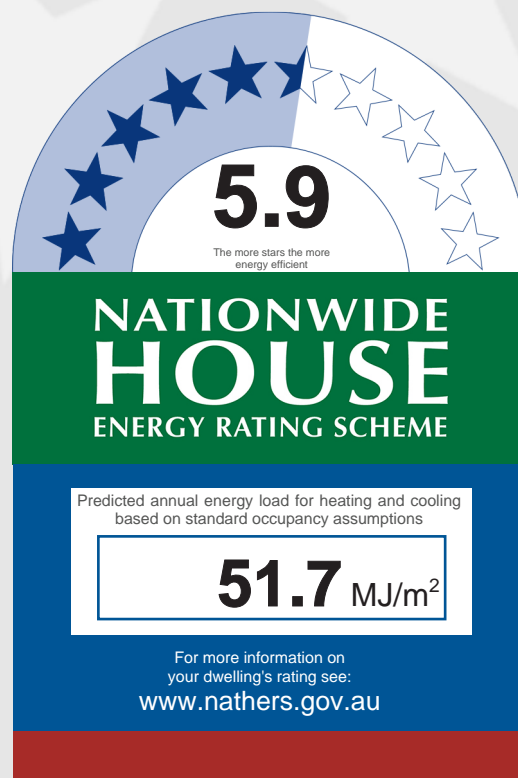
Conditioned: 72.5
Unconditioned: 4.1
Garage: -
TOTAL: 76.6

Annual thermal performance loads (MJ/m²)

Heating: 35.4
Cooling: 16.3
TOTAL: 51.7

Plan documents

Plan ref/date: Project No. 21813
Prepared by: Wolski Coppin Architecture



Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL:** 0

Principal downlight type: Compact fluorescent

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

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Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	21.12SD	2100	1200	ESE	Bedroom 1	No
ALM-002-01 A	Opening 9	1500	3000	ESE	Bedroom 2	No
ALM-002-01 A	21.36SD	2100	3600	ESE	Kitchen/Living	No
ALM-002-01 A	Opening 10	1500	1200	NNE	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	1.7	SSW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.7	SSW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.6	ESE	Bedroom 1	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	0.4	WNW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	8.7	WNW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.6	ESE	Bedroom 2	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	2.1	NNE	Bedroom 2	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	5.9	SSW	Bedroom 2	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.4	WNW	Ensuite	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.3	SSW	Ensuite	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3	SSW	Kitchen/Living	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: 190ZKLZVE9

Date of Certificate: 6 Jun 2019

★ Star rating: 5.9



Building Features

1 : AFS - AFS 200mm (75mm Glasswool)	10	ESE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	18.9	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	1.2	WNW	Bathroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.8	NNE	Bathroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.6	WNW	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	10.9	SSW	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.4	WNW	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.8	SSW	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	2.4	NNE	Entry	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.6	WNW	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.1	NNE	Entry	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	49.5	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 125mm concrete slab	13.6	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 125mm concrete slab	11.2	Enclosed	R0.0	Tiles
Ensuite	FR5 - 125mm concrete slab	3.1	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 125mm concrete slab	34.5	Enclosed	R0.0	Tiles
Bathroom	FR5 - 125mm concrete slab	4.1	Enclosed	R0.0	Tiles
Entry	FR5 - 125mm concrete slab	10.1	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **190ZKLZVE9**

Date of Certificate: **6 Jun 2019**

★ Star rating: **5.9**



Building Features

Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 125mm: 125mm Suspended Slab	0.0	medium

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Certificate Number: 190ZKLZVE9

Date of Certificate: 6 Jun 2019

★ Star rating: 5.9



Additional information

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: CVT6H53GIO

Date of Certificate: 6 Jun 2019

★ Star rating: 6.2



Assessor details

Accreditation number: VIC/BDAV/14/1658
Name: Duncan Hope
Organisation: Senica Consultancy Group
Email: duncan@senica.com.au
Phone: 61280067784
Declaration of interest: Employed by organisation constructing the building
Software: FirstRate5: 5.2.10b (3.13)
AAO: BDAV

Overview

Dwelling details

Address: 208, 26 Whistler Street
Suburb: MANLY
State: NSW Postcode: 2095
Type: New Home NCC Class: Class 2
Lot/DP number: - NatHERS climate zone: 56
Exposure: suburban

Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated
Roof: As indicated
Floor: As indicated
Insulation: Wall: As indicated
Roof: As indicated
Floor: As indicated
Glazing: As indicated
As indicated

Net floor area (m²)

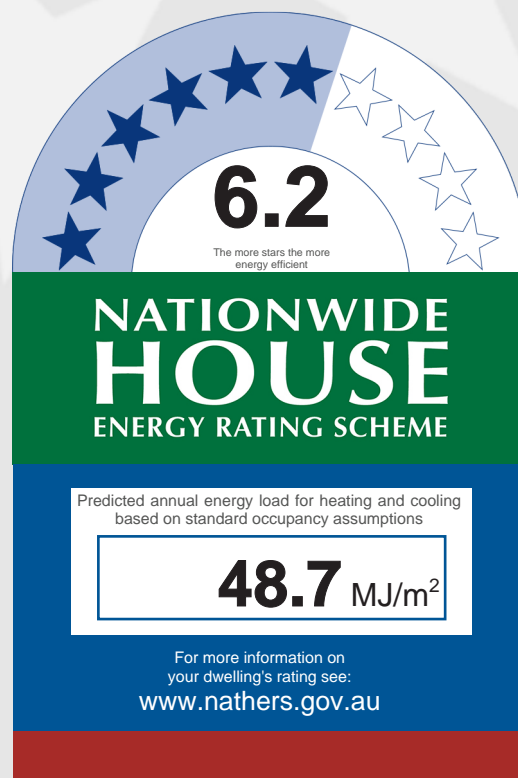
Conditioned: 72.6
Unconditioned: 3.5
Garage: -
TOTAL: 76.1

Annual thermal performance loads (MJ/m²)

Heating: 22.5
Cooling: 26.2
TOTAL: 48.7

Plan documents

Plan ref/date: Project No. 21813
Prepared by: Wolski Coppin Architecture



Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL:** 0

Principal downlight type: Compact fluorescent

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Window selection - default windows only

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: CVT6H53GIO

Date of Certificate: 6 Jun 2019

★ Star rating: 6.2



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	21.135SW	2100	1350	SSW	Bedroom 1	No
ALM-002-01 A	21.045FW	2100	450	WNW	Bedroom 1	No
ALM-002-01 A	21.095SW	2100	950	SSW	Bedroom 2	No
ALM-002-01 A	21.045FW	2100	450	WNW	Bedroom 2	No
ALM-002-01 A	Opening 13	1500	2100	SSW	Kitchen/Living	No
ALM-002-01 A	Opening 14	1500	1300	SSW	Kitchen/Living	No
ALM-002-01 A	21.45SD	2100	4500	ESE	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
----	---------------------------	------------------------	-------------	-----------	---------------	-----------------------

External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	4	WNW	Entry	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	10.7	NNE	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.4	WNW	Ensuite	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	0.7	NNE	Ensuite	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.5	SSW	Bedroom 1	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	11	WNW	Bedroom 1	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	7	SSW	Bedroom 2	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	6.9	WNW	Bedroom 2	Yes	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: CVT6H53GIO

Date of Certificate: 6 Jun 2019

★ Star rating: 6.2



Building Features

1 : AFS - AFS 200mm (75mm Glasswool)	3.7	NNE	Bathroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.5	ESE	Bathroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.3	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	9.5	SSW	Kitchen/Living	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	10.9	ESE	Kitchen/Living	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	2.1	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	9	ESE	Kitchen/Living	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	57.9	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Entry	FR5 - 125mm concrete slab	7.5	Enclosed	R0.0	Tiles
Ensuite	FR5 - 125mm concrete slab	3.5	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - 125mm concrete slab	14.3	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 125mm concrete slab	10.6	Enclosed	R0.0	Tiles
Bathroom	FR5 - 125mm concrete slab	3.5	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 125mm concrete slab	36.7	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 125mm: 125mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: CVT6H53GIO

Date of Certificate: 6 Jun 2019

★ Star rating: 6.2



Additional information

Explanatory notes

About this report

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General Information

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **DNG78LA1QZ**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.2**



Assessor details

Accreditation number: **VIC/BDAV/14/1658**
Name: **Duncan Hope**
Organisation: **Senica Consultancy Group**
Email: **duncan@senica.com.au**
Phone: **61280067784**
Declaration of interest: **Employed by organisation constructing the building**
Software: **FirstRate5: 5.2.10b (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **601, 26 Whistler Street**
Suburb: **MANLY**
State: **NSW** Postcode: **2095**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **56**
Exposure: **open**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Insulation: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Glazing: **As indicated**
As indicated

Net floor area (m²)

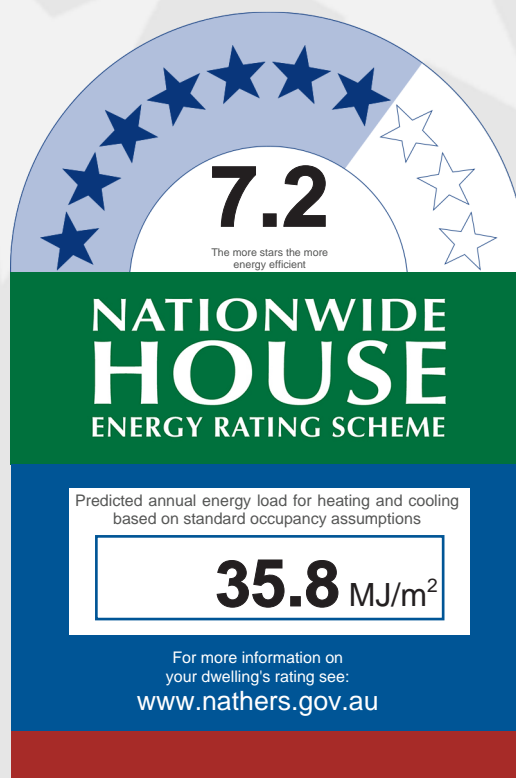
Conditioned: **126.7**
Unconditioned: **2.6**
Garage: **-**
TOTAL: **129.3**

Annual thermal performance loads (MJ/m²)

Heating: **15.5**
Cooling: **20.3**
TOTAL: **35.8**

Plan documents

Plan ref/date: **Project No. 21813**
Prepared by: **Wolski Coppin Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **0**
Unsealed: **0**
TOTAL:** **0**

Principal downlight type: **Compact fluorescent**

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

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Certificate Number: **DNG78LA1QZ**

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★ Star rating: **7.2**



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	Opening 60	2100	2700	NNE	Bedroom 1	No
ALM-002-01 A	Opening 65	2100	1100	WNW	Bedroom 2	No
ALM-002-01 A	Opening 63	2100	1500	WNW	Bedroom 2	No
ALM-002-01 A	Opening 62	2100	702	WNW	Bedroom 3	No
ALM-002-01 A	Opening 61	2100	503	SSW	Bedroom 3	No
ALM-002-01 A	Opening 57	2100	2400	NNE	Kitchen/Living	No
ALM-002-01 A	Opening 64	2100	3000	WNW	Kitchen/Living	No
ALM-002-01 A	Opening 59	2100	3700	NNE	Kitchen/Living	No
ALM-002-01 A	Opening 58	2100	2720	WNW	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No
2 : FR5 - Internal Plasterboard Stud Wall		No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	10.8	ESE	Bedroom 1	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	9.3	NNE	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	0.8	SSW	Night 6	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	9.9	ESE	Night 6	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	3.9	SSW	Entry Study	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **DNG78LA1QZ**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.2**



Building Features

1 : AFS - AFS 162mm (75mm Glasswool)	4.1	ESE	Entry Study	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	5.2	SSW	Laundry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	ESE	Laundry	No	Yes
2 : FR5 - Internal Plasterboard Stud Wall	0.7	NNE	Laundry	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.6	WNW	Bedroom 2	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.5	WNW	Bedroom 2	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	12.3	SSW	Bedroom 2	No	No
2 : FR5 - Internal Plasterboard Stud Wall	2.7	ESE	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	8.2	WNW	Bedroom 3	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	1.8	SSW	Bedroom 3	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.6	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	14.2	WNW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	1	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	1.7	ESE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	11.1	NNE	Kitchen/Living	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	8.7	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	5.5	SSW	Ensuite (Bed 2)	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.9	ESE	Ensuite (Bed 2)	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	123.8	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 125mm concrete slab	13.8	Enclosed	R0.0	Carpet
Night 5	FR5 - 125mm concrete slab	5.5	Enclosed	R0.0	Carpet
Night 6	FR5 - 125mm concrete slab	8.3	Enclosed	R0.0	Tiles
Entry Study	FR5 - 125mm concrete slab	13.4	Enclosed	R0.0	Tiles
Bath	FR5 - 125mm concrete slab	3.4	Enclosed	R0.0	Tiles
Laundry	FR5 - 125mm concrete slab	2.6	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 125mm concrete slab	15.7	Enclosed	R0.0	Carpet
Bedroom 3	FR5 - 125mm concrete slab	12.9	Enclosed	R0.0	Carpet
Kitchen/Living	FR5 - 125mm concrete slab	50	Enclosed	R0.0	Tiles

Nationwide House Energy Rating Scheme* Certificate



Certificate Number: **DNG78LA1QZ**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.2**

Building Features

Ensuite (Bed 2) FR5 - 125mm concrete slab 3.7 Enclosed R0.0 Carpet

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 125mm: 125mm Suspended Slab	0.0	medium

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Certificate Number: **DNG78LA1QZ**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.2**



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Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **DPRV7CCY0F**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.8**



Assessor details

Accreditation number: **VIC/BDAV/14/1658**
Name: **Duncan Hope**
Organisation: **Senica Consultancy Group**
Email: **duncan@senica.com.au**
Phone: **61280067784**
Declaration of interest: **Employed by organisation constructing the building**
Software: **FirstRate5: 5.2.10b (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **401, 26 Whistler Street**
Suburb: **MANLY**
State: **NSW** Postcode: **2095**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **56**
Exposure: **suburban**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Insulation: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Glazing: **As indicated**
As indicated

Net floor area (m²)

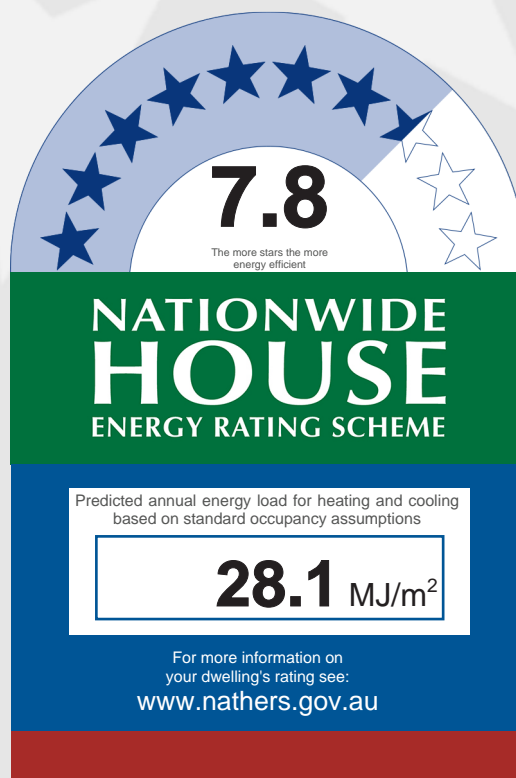
Conditioned: **77.6**
Unconditioned: **5.3**
Garage: **-**
TOTAL: **82.9**

Annual thermal performance loads (MJ/m²)

Heating: **7.3**
Cooling: **20.8**
TOTAL: **28.1**

Plan documents

Plan ref/date: **Project No. 21813**
Prepared by: **Wolski Coppin Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **0**
Unsealed: **0**
TOTAL:** **0**

Principal downlight type: **Compact fluorescent**

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

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Certificate Number: **DPRV7CCY0F**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.8**



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	bed 1	2100	1600	NNE	Bedroom 1	No
ALM-002-01 A	bed 2	2100	1200	WNW	Bedroom 2	No
ALM-002-01 A	living	1800	3600	NNE	Kitchen/Living	No
ALM-002-01 A	balcony	2100	2500	WNW	Kitchen/Living	No
ALM-002-01 A	kitchen	1200	2700	NNE	Kitchen/Living	No
ALM-002-01 A	kitchen	1200	1200	WNW	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
----	---------------------------	------------------------	-------------	-----------	---------------	-----------------------

External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	8.3	ESE	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.8	NNE	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.4	WNW	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	8.7	SSW	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	6	ESE	ensuite	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	SSW	bath	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.6	SSW	laundry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.2	ESE	laundry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	6.4	SSW	entry	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **DPRV7CCY0F**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.8**



Building Features

1 : AFS - AFS 162mm (75mm Glasswool)	3.8	ESE	entry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	10.5	NNE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.1	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	7.5	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	6.2	WNW	Kitchen/Living	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	71.4	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 150mm concrete slab Lined	16.5	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 150mm concrete slab Lined	10.9	Enclosed	R0.0	Tiles
ensuite	FR5 - 150mm concrete slab Lined	4.8	Enclosed	R0.0	Tiles
bath	FR5 - 150mm concrete slab Lined	3.6	Enclosed	R0.0	Tiles
laundry	FR5 - 150mm concrete slab Lined	1.7	Enclosed	R0.0	Tiles
entry	FR5 - 150mm concrete slab Lined	8.2	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 150mm concrete slab Lined	37.1	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **DPRV7CCY0F**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.8**



Additional information

Explanatory notes

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Contact

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **E7FH4EBFOJ**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.6**



Assessor details

Accreditation number: **VIC/BDAV/14/1658**
Name: **Duncan Hope**
Organisation: **Senica Consultancy Group**
Email: **duncan@senica.com.au**
Phone: **61280067784**
Declaration of interest: **Employed by organisation constructing the building**
Software: **FirstRate5: 5.2.10b (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **701, 26 Whistler Street**
Suburb: **MANLY**
State: **NSW** Postcode: **2095**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **56**
Exposure: **open**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Insulation: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Glazing: **As indicated**
As indicated

Net floor area (m²)

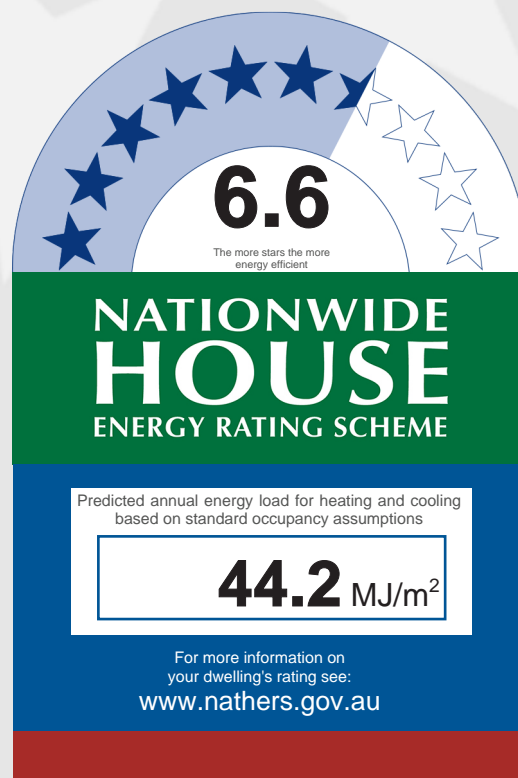
Conditioned: **126.7**
Unconditioned: **2.6**
Garage: **-**
TOTAL: **129.3**

Annual thermal performance loads (MJ/m²)

Heating: **24.6**
Cooling: **19.6**
TOTAL: **44.2**

Plan documents

Plan ref/date: **Project No. 21813**
Prepared by: **Wolski Coppin Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **0**
Unsealed: **0**
TOTAL:** **0**

Principal downlight type: **Compact fluorescent**

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



<https://www.fr5.com.au/QRCodeLandIng?PublicId=E7FH4EBFOJ>

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **E7FH4EBFOJ**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.6**



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	Opening 60	2100	2700	NNE	Bedroom 1	No
ALM-002-01 A	Opening 65	2100	1100	WNW	Bedroom 2	No
ALM-002-01 A	Opening 63	2100	1500	WNW	Bedroom 2	No
ALM-002-01 A	Opening 62	2100	702	WNW	Bedroom 3	No
ALM-002-01 A	Opening 61	2100	503	SSW	Bedroom 3	No
ALM-002-01 A	Opening 57	2100	2400	NNE	Kitchen/Living	No
ALM-002-01 A	Opening 64	2100	3000	WNW	Kitchen/Living	No
ALM-002-01 A	Opening 59	2100	3700	NNE	Kitchen/Living	No
ALM-002-01 A	Opening 58	2100	2720	WNW	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	10.8	ESE	Bedroom 1	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	9.3	NNE	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	0.8	SSW	Night 6	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	9.9	ESE	Night 6	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	3.9	SSW	Entry Study	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.1	ESE	Entry Study	No	Yes

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **E7FH4EBFOJ**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.6**



Building Features

1 : AFS - AFS 162mm (75mm Glasswool)	5.2	SSW	Laundry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	ESE	Laundry	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	0.7	NNE	Laundry	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.6	WNW	Bedroom 2	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.5	WNW	Bedroom 2	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	12.3	SSW	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.7	ESE	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	8.2	WNW	Bedroom 3	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	1.8	SSW	Bedroom 3	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.6	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	14.2	WNW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	1	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	1.7	ESE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	11.1	NNE	Kitchen/Living	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	8.7	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	5.5	SSW	Ensuite (Bed 2)	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.9	ESE	Ensuite (Bed 2)	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	123.8	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 125mm concrete slab	13.8	Enclosed	R0.0	Carpet
Night 5	FR5 - 125mm concrete slab	5.5	Enclosed	R0.0	Carpet
Night 6	FR5 - 125mm concrete slab	8.3	Enclosed	R0.0	Tiles
Entry Study	FR5 - 125mm concrete slab	13.4	Enclosed	R0.0	Tiles
Bath	FR5 - 125mm concrete slab	3.4	Enclosed	R0.0	Tiles
Laundry	FR5 - 125mm concrete slab	2.6	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 125mm concrete slab	15.7	Enclosed	R0.0	Carpet
Bedroom 3	FR5 - 125mm concrete slab	12.9	Enclosed	R0.0	Carpet
Kitchen/Living	FR5 - 125mm concrete slab	50	Enclosed	R0.0	Tiles
Ensuite (Bed 2)	FR5 - 125mm concrete slab	3.7	Enclosed	R0.0	Carpet

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **E7FH4EBFOJ**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.6**



Building Features

Ceiling type

Location	Material	Added insulation	Roof space above
Bedroom 1	Plasterboard	R3.0	No
Night 6	Plasterboard	R3.0	No
Entry Study	Plasterboard	R3.0	No
Bath	Plasterboard	R3.0	No
Laundry	Plasterboard	R3.0	No
Bedroom 2	Plasterboard	R3.0	No
Bedroom 3	Plasterboard	R3.0	No
Kitchen/Living	Plasterboard	R3.0	No
Ensuite (Bed 2)	Plasterboard	R3.0	No

Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 125mm: 125mm Suspended Slab	0.0	medium

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Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **EHIXSEM764**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.2**



Assessor details

Accreditation number: **VIC/BDAV/14/1658**
Name: **Duncan Hope**
Organisation: **Senica Consultancy Group**
Email: **duncan@senica.com.au**
Phone: **61280067784**
Declaration of interest: **Employed by organisation constructing the building**
Software: **FirstRate5: 5.2.10b (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **307, 26 Whistler Street**
Suburb: **MANLY**
State: **NSW** Postcode: **2095**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **56**
Exposure: **suburban**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Insulation: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Glazing: **As indicated**
As indicated

Net floor area (m²)

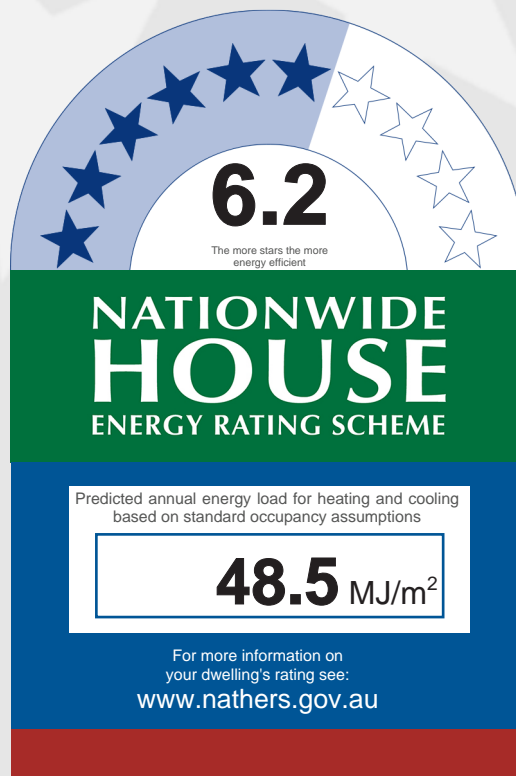
Conditioned: **72.6**
Unconditioned: **3.5**
Garage: **-**
TOTAL: **76.1**

Annual thermal performance loads (MJ/m²)

Heating: **23.9**
Cooling: **24.6**
TOTAL: **48.5**

Plan documents

Plan ref/date: **Project No. 21813**
Prepared by: **Wolski Coppin Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **0**
Unsealed: **0**
TOTAL:** **0**

Principal downlight type: **Compact fluorescent**

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

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Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	21.135SW	2100	1350	SSW	Bedroom 1	No
ALM-002-01 A	21.045FW	2100	450	WNW	Bedroom 1	No
ALM-002-01 A	21.095SW	2100	950	SSW	Bedroom 2	No
ALM-002-01 A	21.045FW	2100	450	WNW	Bedroom 2	No
ALM-002-01 A	Opening 13	1500	2100	SSW	Kitchen/Living	No
ALM-002-01 A	Opening 14	1500	1300	SSW	Kitchen/Living	No
ALM-002-01 A	21.45SD	2100	4500	ESE	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	4	WNW	Entry	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	10.7	NNE	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.4	WNW	Ensuite	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	0.7	NNE	Ensuite	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.5	SSW	Bedroom 1	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	11	WNW	Bedroom 1	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	7	SSW	Bedroom 2	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	6.9	WNW	Bedroom 2	Yes	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **EHIXSEM764**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.2**



Building Features

1 : AFS - AFS 200mm (75mm Glasswool)	3.7	NNE	Bathroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.5	ESE	Bathroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.3	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	9.5	SSW	Kitchen/Living	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	10.9	ESE	Kitchen/Living	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	2.1	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	9	ESE	Kitchen/Living	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	57.9	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Entry	FR5 - 125mm concrete slab	7.5	Enclosed	R0.0	Tiles
Ensuite	FR5 - 125mm concrete slab	3.5	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - 125mm concrete slab	14.3	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 125mm concrete slab	10.6	Enclosed	R0.0	Tiles
Bathroom	FR5 - 125mm concrete slab	3.5	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 125mm concrete slab	36.7	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 125mm: 125mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **EHIXSEM764**

Date of Certificate: **6 Jun 2019**

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Contact

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: EV8KUAVVOH

Date of Certificate: 6 Jun 2019

★ Star rating: 7.8



Assessor details

Accreditation number: VIC/BDAV/14/1658
Name: Duncan Hope
Organisation: Senica Consultancy Group
Email: duncan@senica.com.au
Phone: 61280067784
Declaration of interest: Employed by organisation constructing the building
Software: FirstRate5: 5.2.10b (3.13)
AAO: BDAV

Overview

Dwelling details

Address: 105, 26 Whistler Street
Suburb: MANLY
State: NSW Postcode: 2095
Type: New Home NCC Class: Class 2
Lot/DP number: - NatHERS climate zone: 56
Exposure: suburban

Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated
Roof: As indicated
Floor: As indicated
Insulation: Wall: As indicated
Roof: As indicated
Floor: As indicated
Glazing: As indicated
As indicated

Net floor area (m²)

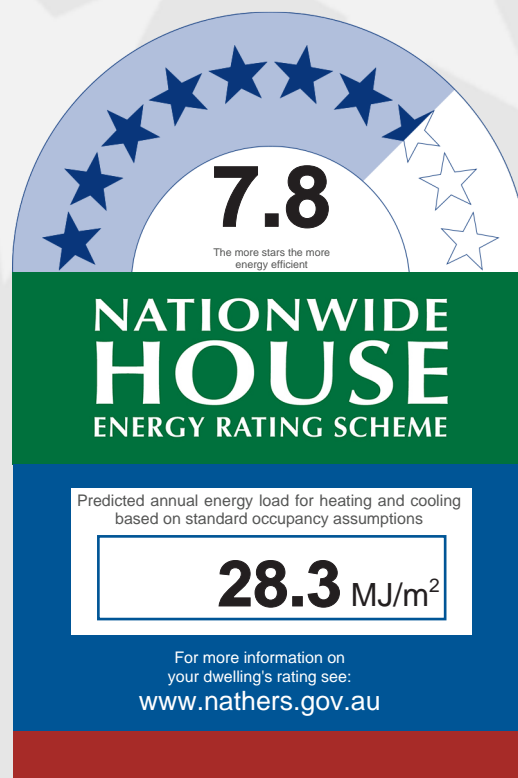
Conditioned: 69.9
Unconditioned: 3.7
Garage: -
TOTAL: 73.6

Annual thermal performance loads (MJ/m²)

Heating: 12
Cooling: 16.3
TOTAL: 28.3

Plan documents

Plan ref/date: Project No. 21813
Prepared by: Wolski Coppin Architecture



Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL:** 0

Principal downlight type: Compact fluorescent

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

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<https://www.fr5.com.au/QRCodeLand ing?PublicId=EV8KUAVVOH>

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: EV8KUAVVOH

Date of Certificate: 6 Jun 2019

★ Star rating: 7.8



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	21.22SD	2100	2200	E	Bedroom 1	No
ALM-002-01 A	Opening 13	2100	2500	N	Living	No
ALM-002-01 A	Opening 11	2100	820	W	Living	No
ALM-002-01 A	21.045FW	2100	1250	E	Living	No
ALM-002-01 A	Opening 12	2100	1000	N	Bedroom 2	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No
2 : FR5 - Internal Plasterboard Stud Wall		No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	4.6	W	Ensuite	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	4.1	N	Ensuite	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	11.7	N	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.1	E	Bedroom 1	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	6.7	N	Living	Yes	Yes
2 : FR5 - Internal Plasterboard Stud Wall	0.5	N	Living	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.1	W	Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	9	S	Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	9.6	E	Living	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **EV8KUAVVOH**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.8**



Building Features

1 : AFS - AFS 200mm (75mm Glasswool)	5.5	E	Bathroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.6	S	Bathroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.6	S	Bedroom 2	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	2.7	N	Bedroom 2	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	8	W	Bedroom 2	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	6.6	S	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	1.7	W	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.3	S	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.6	W	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	2.8	S	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	1.4	E	Entry	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	59.2	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Ensuite	FR5 - 125mm concrete slab	3.3	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - 125mm concrete slab	12.8	Enclosed	R0.0	Tiles
Living	FR5 - 125mm concrete slab	36	Enclosed	R0.0	Tiles
Bathroom	FR5 - 125mm concrete slab	3.7	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 125mm concrete slab	11.2	Enclosed	R0.0	Tiles
Entry	FR5 - 125mm concrete slab	6.5	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Nationwide House Energy Rating Scheme* Certificate



Certificate Number: **EV8KUAVVOH**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.8**

Building Features

Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 125mm: 125mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: EV8KUAVVOH

Date of Certificate: 6 Jun 2019

★ Star rating: 7.8



Additional information

Explanatory notes

About this report

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

General Information

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

Accredited Assessors

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

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Contact

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **FVFK03DJOU**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.3**



Assessor details

Accreditation number: **VIC/BDAV/14/1658**
Name: **Duncan Hope**
Organisation: **Senica Consultancy Group**
Email: **duncan@senica.com.au**
Phone: **61280067784**
Declaration of interest: **Employed by organisation constructing the building**
Software: **FirstRate5: 5.2.10b (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **504, 26 Whistler Street**
Suburb: **MANLY**
State: **NSW** Postcode: **2095**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **56**
Exposure: **open**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Insulation: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Glazing: **As indicated**
As indicated

Net floor area (m²)

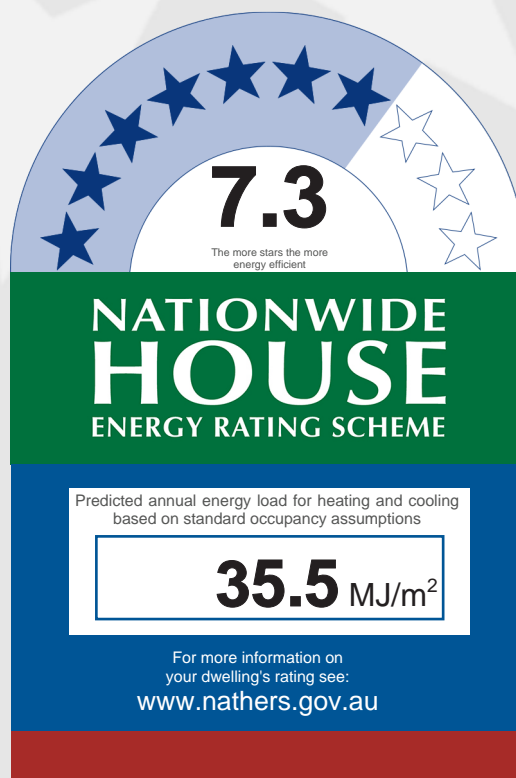
Conditioned: **116.3**
Unconditioned: **4.4**
Garage: **-**
TOTAL: **120.7**

Annual thermal performance loads (MJ/m²)

Heating: **20.6**
Cooling: **14.9**
TOTAL: **35.5**

Plan documents

Plan ref/date: **Project No. 21813**
Prepared by: **Wolski Coppin Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **0**
Unsealed: **0**
TOTAL:** **0**

Principal downlight type: **Compact fluorescent**

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **FVFK03DJOU**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.3**



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	Opening 69	2100	2600	ESE	Bedroom 1	No
ALM-002-01 A	Opening 67	2100	1500	SSW	Bedroom 1	No
ALM-002-01 A	Opening 70	2100	1800	SSW	Bedroom 2	No
ALM-002-01 A	Opening 71	2100	1500	ESE	Bedroom 2	No
ALM-002-01 A	Opening 66	2100	400	WNW	Bedroom 3	No
ALM-002-01 A	Opening 65	2100	1200	SSW	Bedroom 3	No
ALM-002-01 A	Opening 68	2100	400	WNW	Ensuite 1	No
ALM-002-01 A	Opening 72	2100	820	SSW	Kitchen/Living	No
ALM-002-01 A	Opening 74	2100	3660	ESE	Kitchen/Living	No
ALM-002-01 A	Opening 75	2100	922	NNE	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	0.8	ESE	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	1.9	SSW	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	8.6	ESE	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	9.6	SSW	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	6	SSW	Bedroom 2	Yes	Yes

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **FVFK03DJOU**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.3**



Building Features

1 : AFS - AFS 162mm (75mm Glasswool)	8.4	ESE	Bedroom 2	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	9.8	WNW	Bedroom 3	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	3.4	SSW	Bedroom 3	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	0.8	NNE	Bedroom 3	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.8	WNW	Ensuite 1	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.9	SSW	Ensuite 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.3	WNW	Bath	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	6.6	NNE	Bath	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	1.1	WNW	Entry	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	0.8	SSW	Entry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.3	WNW	Entry	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	1	ESE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.1	SSW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	11.3	ESE	Kitchen/Living	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	9.7	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	12.5	NNE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.5	WNW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	0.5	NNE	Kitchen/Living	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	95.9	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 150mm concrete slab Lined	18.3	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 150mm concrete slab Lined	16.4	Enclosed	R0.0	Carpet
Bedroom 3	FR5 - 150mm concrete slab Lined	14.2	Enclosed	R0.0	Carpet
Ensuite 2	FR5 - 150mm concrete slab Lined	3.6	Enclosed	R0.0	Tiles
Ensuite 1	FR5 - 150mm concrete slab Lined	8	Enclosed	R0.0	Tiles
Hallway	FR5 - 150mm concrete slab Lined	4.9	Enclosed	R0.0	Tiles
Bath	FR5 - 150mm concrete slab Lined	4.4	Enclosed	R0.0	Tiles
Entry	FR5 - 150mm concrete slab Lined	3.5	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 150mm concrete slab Lined	47.6	Enclosed	R0.0	Tiles

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **FVFK03DJOU**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.3**



Building Features

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **FVFK03DJOU**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.3**



Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **FX18Y2N1RB**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.8**



Assessor details

Accreditation number: **VIC/BDAV/14/1658**
Name: **Duncan Hope**
Organisation: **Senica Consultancy Group**
Email: **duncan@senica.com.au**
Phone: **61280067784**
Declaration of interest: **Employed by organisation constructing the building**
Software: **FirstRate5: 5.2.10b (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **205, 26 Whistler Street**
Suburb: **MANLY**
State: **NSW** Postcode: **2095**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **56**
Exposure: **suburban**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Insulation: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Glazing: **As indicated**
As indicated

Net floor area (m²)

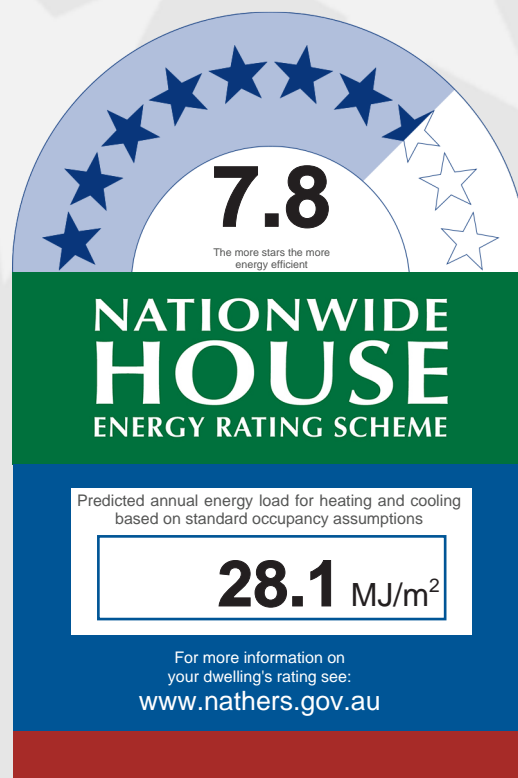
Conditioned: **69.9**
Unconditioned: **3.7**
Garage: **-**
TOTAL: **73.6**

Annual thermal performance loads (MJ/m²)

Heating: **13.5**
Cooling: **14.6**
TOTAL: **28.1**

Plan documents

Plan ref/date: **Project No. 21813**
Prepared by: **Wolski Coppin Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **0**
Unsealed: **0**
TOTAL:** **0**

Principal downlight type: **Compact fluorescent**

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **FX18Y2N1RB**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.8**



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	21.22SD	2100	2200	E	Bedroom 1	No
ALM-002-01 A	Opening 13	2100	2500	N	Living	No
ALM-002-01 A	Opening 11	2100	820	W	Living	No
ALM-002-01 A	21.045FW	2100	1250	E	Living	No
ALM-002-01 A	Opening 12	2100	1000	N	Bedroom 2	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No
2 : FR5 - Internal Plasterboard Stud Wall		No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	4.6	W	Ensuite	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	4.1	N	Ensuite	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	11.7	N	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.1	E	Bedroom 1	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	6.7	N	Living	Yes	Yes
2 : FR5 - Internal Plasterboard Stud Wall	0.5	N	Living	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.1	W	Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	9	S	Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	9.6	E	Living	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **FX18Y2N1RB**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.8**



Building Features

1 : AFS - AFS 200mm (75mm Glasswool)	5.5	E	Bathroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.6	S	Bathroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.6	S	Bedroom 2	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	2.7	N	Bedroom 2	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	8	W	Bedroom 2	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	6.6	S	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	1.7	W	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.3	S	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.6	W	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	2.8	S	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	1.4	E	Entry	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	59.2	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Ensuite	FR5 - 125mm concrete slab	3.3	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - 125mm concrete slab	12.8	Enclosed	R0.0	Tiles
Living	FR5 - 125mm concrete slab	36	Enclosed	R0.0	Tiles
Bathroom	FR5 - 125mm concrete slab	3.7	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 125mm concrete slab	11.2	Enclosed	R0.0	Tiles
Entry	FR5 - 125mm concrete slab	6.5	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **FX18Y2N1RB**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.8**



Building Features

Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 125mm: 125mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **FX18Y2N1RB**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.8**



Additional information

Explanatory notes

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Contact

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **G4LZG9E5U7**

Date of Certificate: **6 Jun 2019**

★ Star rating: **5.2**



Assessor details

Accreditation number: **VIC/BDAV/14/1658**
Name: **Duncan Hope**
Organisation: **Senica Consultancy Group**
Email: **duncan@senica.com.au**
Phone: **61280067784**
Declaration of interest: **Employed by organisation constructing the building**
Software: **FirstRate5: 5.2.10b (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **104, 26 Whistler Street**
Suburb: **MANLY**
State: **NSW** Postcode: **2095**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **56**
Exposure: **suburban**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Insulation: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Glazing: **As indicated**
As indicated

Net floor area (m²)

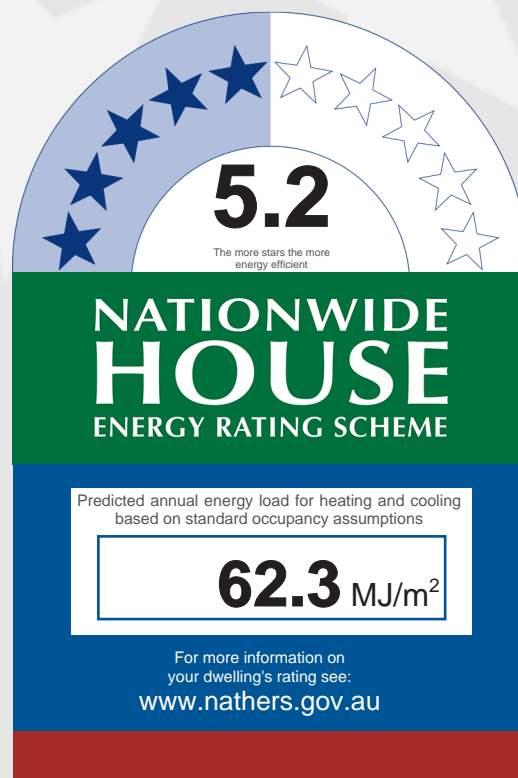
Conditioned: **74.2**
Unconditioned: **5.9**
Garage: **-**
TOTAL: **80.1**

Annual thermal performance loads (MJ/m²)

Heating: **43.6**
Cooling: **18.7**
TOTAL: **62.3**

Plan documents

Plan ref/date: **Project No. 21813**
Prepared by: **Wolski Coppin Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **0**
Unsealed: **0**
TOTAL:** **0**

Principal downlight type: **Compact fluorescent**

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **G4LZG9E5U7**

Date of Certificate: **6 Jun 2019**

★ Star rating: **5.2**



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	bed 1	2100	600	ESE	Bedroom 1	No
ALM-002-01 A	bed 1	2100	600	ESE	Bedroom 1	No
ALM-002-01 A	bed 2	2100	1600	SSW	Bedroom 2	No
ALM-002-01 A	kitchen	2100	300	WNW	Kitchen/Living	No
ALM-002-01 A	dining	2100	1800	WNW	Kitchen/Living	No
ALM-002-01 A	balcony	2100	2400	SSW	Kitchen/Living	No
ALM-002-01 A	living	2100	2800	WNW	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	8.6	SSW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.3	ESE	Bedroom 1	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.5	NNE	Bedroom 2	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	6.1	SSW	Bedroom 2	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	8.5	ESE	Bedroom 2	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.4	SSW	laundry	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.3	ESE	laundry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	4.6	NNE	laundry	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **G4LZG9E5U7**

Date of Certificate: **6 Jun 2019**

★ Star rating: **5.2**



Building Features

1 : AFS - AFS 200mm (75mm Glasswool)	3.4	WNW	bath	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.7	NNE	bath	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.5	WNW	entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.8	ESE	entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	8.5	WNW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	6.5	SSW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	8	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	9.1	SSW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	19.8	NNE	Kitchen/Living	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	64	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 150mm concrete slab	12.7	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 150mm concrete slab	12	Enclosed	R0.0	Carpet
laundry	FR5 - 150mm concrete slab	2.6	Enclosed	R0.0	Tiles
bath	FR5 - 150mm concrete slab	3.3	Enclosed	R0.0	Tiles
ensuite	FR5 - 150mm concrete slab	3.7	Enclosed	R0.0	Tiles
entry	FR5 - 150mm concrete slab	7.4	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 150mm concrete slab	38.5	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **G4LZG9E5U7**

Date of Certificate: **6 Jun 2019**

★ Star rating: **5.2**



Building Features

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **G4LZG9E5U7**

Date of Certificate: **6 Jun 2019**

★ Star rating: **5.2**



Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate



Certificate Number: **IB97S9GUWI**

Date of Certificate: **6 Jun 2019**

★ Star rating: **5.6**

Assessor details

Accreditation number: **VIC/BDAV/14/1658**
Name: **Duncan Hope**
Organisation: **Senica Consultancy Group**
Email: **duncan@senica.com.au**
Phone: **61280067784**
Declaration of interest: **Employed by organisation constructing the building**
Software: **FirstRate5: 5.2.10b (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **102, 26 Whistler Street**
Suburb: **MANLY**
State: **NSW** Postcode: **2095**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **56**
Exposure: **suburban**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Insulation: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Glazing: **As indicated**
As indicated

Net floor area (m²)

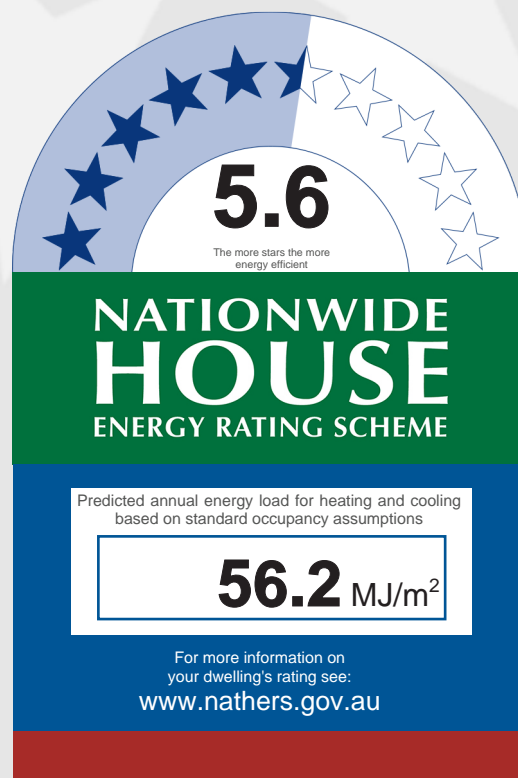
Conditioned: **84.4**
Unconditioned: **1.8**
Garage: **-**
TOTAL: **86.2**

Annual thermal performance loads (MJ/m²)

Heating: **38.1**
Cooling: **18.1**
TOTAL: **56.2**

Plan documents

Plan ref/date: **Project No. 21813**
Prepared by: **Wolski Coppin Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **0**
Unsealed: **0**
TOTAL:** **0**

Principal downlight type: **Compact fluorescent**

NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

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Date of Certificate: **6 Jun 2019**

★ Star rating: **5.6**



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	bae 1	2100	1600	WNW	Bedroom 1	No
ALM-002-01 A	bad 2	2100	2620	WNW	Bedroom 2	No
ALM-002-01 A	balcony	2100	2700	NNE	Kitchen/Living	No
ALM-002-01 A	living	2100	1800	WNW	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	1.4	WNW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.7	NNE	Bedroom 1	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	4.4	WNW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.7	SSW	Bedroom 1	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	2.1	WNW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	9.5	SSW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	10.2	NNE	Bedroom 2	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.9	WNW	Bedroom 2	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	7.9	ESE	Bedroom 2	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.8	SSW	bath	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.8	NNE	laundry	No	No

Nationwide House Energy Rating Scheme* Certificate

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★ Star rating: **5.6**



Building Features

1 : AFS - AFS 200mm (75mm Glasswool)	3.4	SSW	laundry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.8	ESE	laundry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	4.1	ESE	entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	14.5	SSW	Hall way	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.6	ESE	Hall way	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	6.4	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.5	WNW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.8	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	2.4	WNW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.6	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5	WNW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.7	SSW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	2.7	WNW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	1.4	ESE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	8.6	NNE	study	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.7	SSW	study	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	4.7	ESE	study	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	96.8	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 150mm concrete slab	10.6	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 150mm concrete slab	11	Enclosed	R0.0	Carpet
ensuite	FR5 - 150mm concrete slab	3.3	Enclosed	R0.0	Tiles
dressing	FR5 - 150mm concrete slab	3.6	Enclosed	R0.0	Carpet
bath	FR5 - 150mm concrete slab	3.5	Enclosed	R0.0	Tiles
laundry	FR5 - 150mm concrete slab	1.8	Enclosed	R0.0	Tiles
entry	FR5 - 150mm concrete slab	4.2	Enclosed	R0.0	Tiles
Hall way	FR5 - 150mm concrete slab	7.2	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 150mm concrete slab	34.6	Enclosed	R0.0	Tiles
study	FR5 - 150mm concrete slab	6.3	Enclosed	R0.0	Carpet

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **IB97S9GUWI**

Date of Certificate: **6 Jun 2019**

★ Star rating: **5.6**



Building Features

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **IB97S9GUWI**

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: JVPHUSFE8L

Date of Certificate: 6 Jun 2019

★ Star rating: 7.1



Assessor details

Accreditation number: **VIC/BDAV/14/1658**
Name: **Duncan Hope**
Organisation: **Senica Consultancy Group**
Email: **duncan@senica.com.au**
Phone: **61280067784**
Declaration of interest: **Employed by organisation constructing the building**
Software: **FirstRate5: 5.2.10b (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **602, 26 Whistler Street**
Suburb: **MANLY**
State: **NSW** Postcode: **2095**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **56**
Exposure: **open**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Insulation: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Glazing: **As indicated**
As indicated

Net floor area (m²)

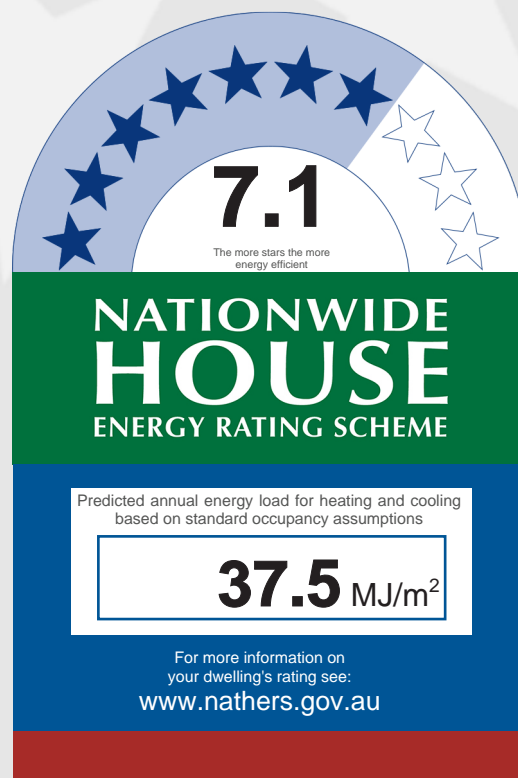
Conditioned: **132.6**
Unconditioned: **3.7**
Garage: **-**
TOTAL: **136.3**

Annual thermal performance loads (MJ/m²)

Heating: **16**
Cooling: **21.5**
TOTAL: **37.5**

Plan documents

Plan ref/date: **Project No. 21813**
Prepared by: **Wolski Coppin Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **0**
Unsealed: **0**
TOTAL:** **0**

Principal downlight type: **Compact fluorescent**

NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: JVPHUSFE8L

Date of Certificate: 6 Jun 2019

★ Star rating: 7.1



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	bed 1	2100	2000	WNW	Bedroom 3	No
ALM-002-01 A	bed 2	2100	1600	SSW	Bedroom 1	No
ALM-002-01 A	balcony	2100	3500	WNW	Kitchen/Living	No
ALM-002-01 A	dining	2100	2500	WNW	Kitchen/Living	No
ALM-002-01 A	Opening 28	2100	500	SSW	Kitchen/Living	No
ALM-002-01 A	Opening 36	2100	950	SSW	Kitchen/Living	No
ALM-002-01 A	Opening 37	2100	950	SSW	Kitchen/Living	No
ALM-002-01 A	Opening 38	2100	1900	WNW	Bedroom 2	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
----	---------------------------	------------------------	-------------	-----------	---------------	-----------------------

External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	1.7	NNE	Bedroom 3	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.3	WNW	Bedroom 3	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	SSW	Bedroom 1	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	10.4	ESE	Bedroom 1	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	2.2	ESE	ensuite	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	NNE	ensuite	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.8	NNE	laundry	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **JVPHUSFE8L**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.1**



Building Features

1 : AFS - AFS 162mm (75mm Glasswool)	4.3	NNE	entry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.1	ESE	entry	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	17.9	WNW	Kitchen/Living	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	2	SSW	Kitchen/Living	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	1.3	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	18.1	SSW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.9	ESE	Kitchen/Living	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.9	ESE	Ensuite	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.1	WNW	Bedroom 2	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.3	WNW	Bedroom 2	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	10.3	NNE	Bedroom 2	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	110.8	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 3	FR5 - 150mm concrete slab Lined	14.8	Enclosed	R0.0	Carpet
Bedroom 1	FR5 - 150mm concrete slab Lined	19.5	Enclosed	R0.0	Carpet
ensuite	FR5 - 150mm concrete slab Lined	3.8	Enclosed	R0.0	Tiles
laundry	FR5 - 150mm concrete slab Lined	2.3	Enclosed	R0.0	Tiles
bath	FR5 - 150mm concrete slab Lined	3.7	Enclosed	R0.0	Tiles
entry	FR5 - 150mm concrete slab Lined	9.8	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 150mm concrete slab Lined	61.8	Enclosed	R0.0	Tiles
Ensuite	FR5 - 125mm concrete slab	6.3	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 125mm concrete slab	14.3	Enclosed	R0.0	Carpet

Ceiling type

Location	Material	Added insulation	Roof space above
Ensuite	Plasterboard	R3.0	No
Bedroom 2	Plasterboard	R3.0	No

Ceiling penetrations

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **JVPHUSFE8L**

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Building Features

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium
Slab:Slab - Suspended Slab : 125mm: 125mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: JVPHUSFE8L

Date of Certificate: 6 Jun 2019

★ Star rating: 7.1



Additional information

Explanatory notes

About this report

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General Information

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **KK36MNI569**

Date of Certificate: **6 Jun 2019**

★ Star rating: **5.9**



Assessor details

Accreditation number: **VIC/BDAV/14/1658**
Name: **Duncan Hope**
Organisation: **Senica Consultancy Group**
Email: **duncan@senica.com.au**
Phone: **61280067784**
Declaration of interest: **Employed by organisation constructing the building**
Software: **FirstRate5: 5.2.10b (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **405, 26 Whistler Street**
Suburb: **MANLY**
State: **NSW** Postcode: **2095**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **56**
Exposure: **suburban**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Insulation: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Glazing: **As indicated**
As indicated

Net floor area (m²)

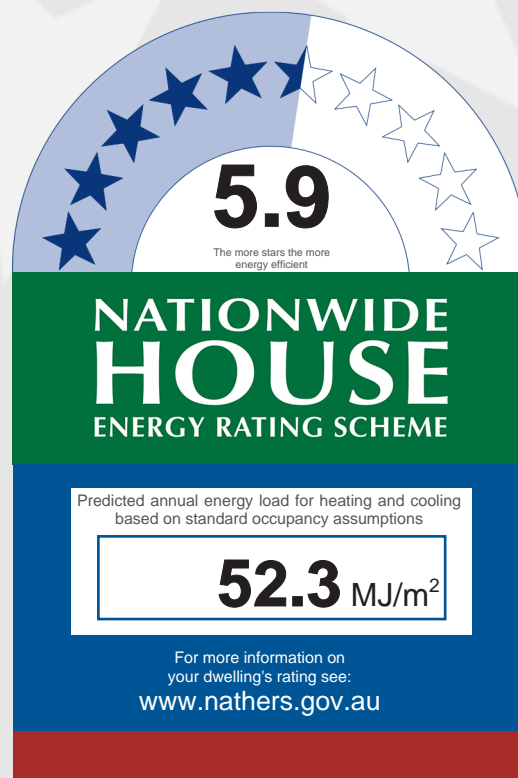
Conditioned: **72.5**
Unconditioned: **4.1**
Garage: **-**
TOTAL: **76.6**

Annual thermal performance loads (MJ/m²)

Heating: **36.6**
Cooling: **15.7**
TOTAL: **52.3**

Plan documents

Plan ref/date: **Project No. 21813**
Prepared by: **Wolski Coppin Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **0**
Unsealed: **0**
TOTAL:** **0**

Principal downlight type: **Compact fluorescent**

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

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Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	21.12SD	2100	1200	ESE	Bedroom 1	No
ALM-002-01 A	Opening 9	1500	3000	ESE	Bedroom 2	No
ALM-002-01 A	21.36SD	2100	3600	ESE	Kitchen/Living	No
ALM-002-01 A	Opening 10	1500	1200	NNE	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	1.7	SSW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.7	SSW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.6	ESE	Bedroom 1	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	0.4	WNW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	8.7	WNW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.6	ESE	Bedroom 2	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	2.1	NNE	Bedroom 2	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	5.9	SSW	Bedroom 2	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.4	WNW	Ensuite	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.3	SSW	Ensuite	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3	SSW	Kitchen/Living	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **KK36MNI569**

Date of Certificate: **6 Jun 2019**

★ Star rating: **5.9**



Building Features

1 : AFS - AFS 200mm (75mm Glasswool)	10	ESE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	18.9	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	1.2	WNW	Bathroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.8	NNE	Bathroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.6	WNW	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	10.9	SSW	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.4	WNW	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.8	SSW	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	2.4	NNE	Entry	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.6	WNW	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.1	NNE	Entry	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	49.5	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 125mm concrete slab	13.6	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 125mm concrete slab	11.2	Enclosed	R0.0	Tiles
Ensuite	FR5 - 125mm concrete slab	3.1	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 125mm concrete slab	34.5	Enclosed	R0.0	Tiles
Bathroom	FR5 - 125mm concrete slab	4.1	Enclosed	R0.0	Tiles
Entry	FR5 - 125mm concrete slab	10.1	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **KK36MNI569**

Date of Certificate: **6 Jun 2019**

★ Star rating: **5.9**



Building Features

Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 125mm: 125mm Suspended Slab	0.0	medium

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Certificate Number: **KK36MNI569**

Date of Certificate: **6 Jun 2019**

★ Star rating: **5.9**



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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **KL95VSNNH0**

Date of Certificate: **6 Jun 2019**

★ Star rating: **5.9**



Assessor details

Accreditation number: **VIC/BDAV/14/1658**
Name: **Duncan Hope**
Organisation: **Senica Consultancy Group**
Email: **duncan@senica.com.au**
Phone: **61280067784**
Declaration of interest: **Employed by organisation constructing the building**
Software: **FirstRate5: 5.2.10b (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **704, 26 Whistler Street**
Suburb: **MANLY**
State: **NSW** Postcode: **2095**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **56**
Exposure: **open**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Insulation: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Glazing: **As indicated**
As indicated

Net floor area (m²)

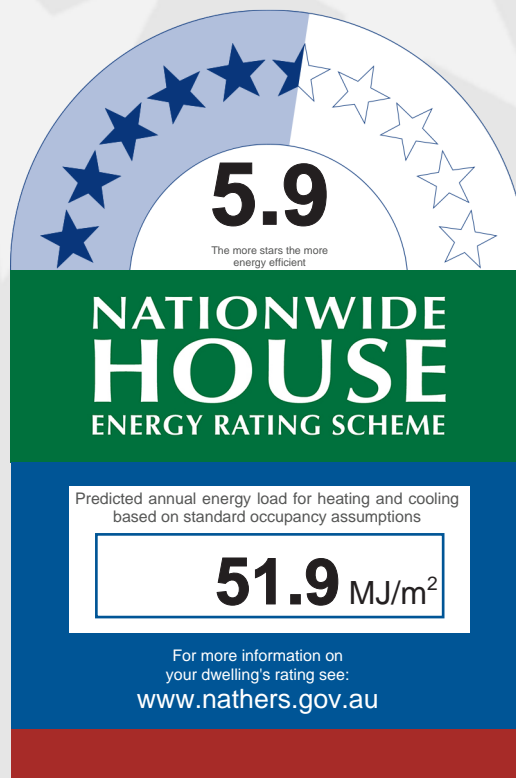
Conditioned: **73**
Unconditioned: **4**
Garage: **-**
TOTAL: **77**

Annual thermal performance loads (MJ/m²)

Heating: **36.8**
Cooling: **15.1**
TOTAL: **51.9**

Plan documents

Plan ref/date: **Project No. 21813**
Prepared by: **Wolski Coppin Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **0**
Unsealed: **0**
TOTAL:** **0**

Principal downlight type: **Compact fluorescent**

NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

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Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-03 A	Aluminium B SG High Solar Gain Low-E	5.4	0.58
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7
BRD-074-20 A	Sig Fixed Window 100 Internally Glazed DG 4-6Ar-4	3.78	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-03 A	Opening 45	2100	3000	SSW	Bedroom 1	No
ALM-002-03 A	Opening 47	2100	2400	SSW	Bedroom 2	No
ALM-002-01 A	Opening 46	2100	450	SSW	Ensuite	No
BRD-074-20 A	Opening 44	2100	2100	SSW	Kitchen/Living	No
BRD-074-20 A	Opening 43	2100	1500	SSW	Kitchen/Living	No
BRD-074-20 A	Opening 42	2100	3000	ESE	Kitchen/Living	No
BRD-074-20 A	Opening 41	2100	1200	NNE	Kitchen/Living	No
BRD-074-20 A	Opening 54	1800	1500	ESE	Kitchen/Living	No
BRD-074-20 A	Opening 55	1800	700	ESE	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
----	---------------------------	------------------------	-------------	-----------	---------------	-----------------------

External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	8.4	SSW	Bedroom 1	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	6.2	ESE	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	8.4	WNW	Bedroom 2	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	8.2	SSW	Bedroom 2	No	Yes

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **KL95VSNNH0**

Date of Certificate: **6 Jun 2019**

★ Star rating: **5.9**



Building Features

1 : AFS - AFS 162mm (75mm Glasswool)	0.6	NNE	Bedroom 2	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	4	SSW	Ensuite	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.3	WNW	Entry	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	7.7	NNE	Entry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	WNW	Bath	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.1	NNE	Bath	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	6	WNW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.9	SSW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.4	SSW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	10.8	ESE	Kitchen/Living	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	7.1	NNE	Kitchen/Living	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.8	ESE	Kitchen/Living	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.2	ESE	Kitchen/Living	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	13.1	NNE	Kitchen/Living	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : WolskiCoppin - 10 - Internal Partition 64 Stud	59.4	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R1.5)

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 150mm concrete slab Lined	13.4	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 150mm concrete slab Lined	11.1	Enclosed	R0.0	Carpet
Ensuite	FR5 - 150mm concrete slab Lined	3	Enclosed	R0.0	Tiles
Entry	FR5 - 150mm concrete slab Lined	6.5	Enclosed	R0.0	Tiles
Bath	FR5 - 150mm concrete slab Lined	4	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 150mm concrete slab Lined	39	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
Bedroom 1	Plasterboard	R3.0	No
Bedroom 2	Plasterboard	R3.0	No
Ensuite	Plasterboard	R3.0	No
Entry	Plasterboard	R3.0	No

Nationwide House Energy Rating Scheme* Certificate

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Building Features

Bath	Plasterboard	R3.0	No
Kitchen/Living	Plasterboard	R3.0	No

Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

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Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: KUE1QLSM9C

Date of Certificate: 6 Jun 2019

★ Star rating: 6.2



Assessor details

Accreditation number: VIC/BDAV/14/1658
Name: Duncan Hope
Organisation: Senica Consultancy Group
Email: duncan@senica.com.au
Phone: 61280067784
Declaration of interest: Employed by organisation constructing the building
Software: FirstRate5: 5.2.10b (3.13)
AAO: BDAV

Overview

Dwelling details

Address: 406, 26 Whistler Street
Suburb: MANLY
State: NSW Postcode: 2095
Type: New Home NCC Class: Class 2
Lot/DP number: - NatHERS climate zone: 56
Exposure: suburban

Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated
Roof: As indicated
Floor: As indicated
Insulation: Wall: As indicated
Roof: As indicated
Floor: As indicated
Glazing: As indicated
As indicated

Net floor area (m²)

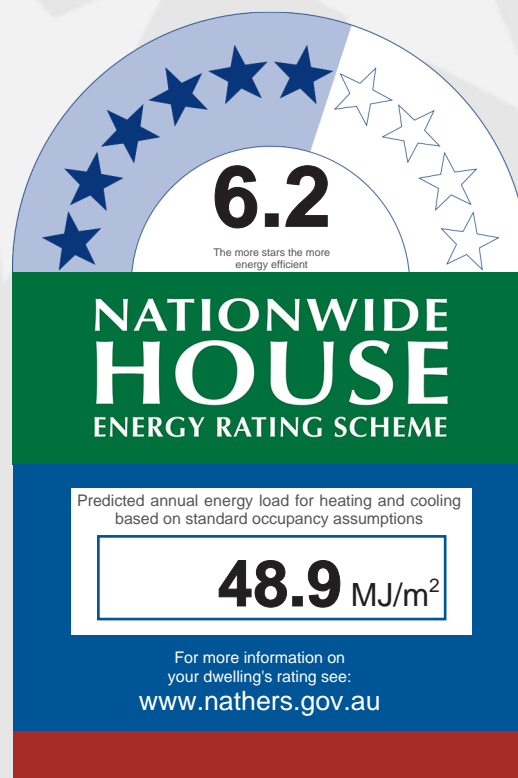
Conditioned: 72.6
Unconditioned: 3.5
Garage: -
TOTAL: 76.1

Annual thermal performance loads (MJ/m²)

Heating: 24.9
Cooling: 24
TOTAL: 48.9

Plan documents

Plan ref/date: Project No. 21813
Prepared by: Wolski Coppin Architecture



Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL:** 0

Principal downlight type: Compact fluorescent

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **KUE1QLSM9C**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.2**



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	21.135SW	2100	1350	SSW	Bedroom 1	No
ALM-002-01 A	21.045FW	2100	450	WNW	Bedroom 1	No
ALM-002-01 A	21.095SW	2100	950	SSW	Bedroom 2	No
ALM-002-01 A	21.045FW	2100	450	WNW	Bedroom 2	No
ALM-002-01 A	Opening 13	1500	2100	SSW	Kitchen/Living	No
ALM-002-01 A	Opening 14	1500	1300	SSW	Kitchen/Living	No
ALM-002-01 A	21.45SD	2100	4500	ESE	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	4	WNW	Entry	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	10.7	NNE	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.4	WNW	Ensuite	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	0.7	NNE	Ensuite	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.5	SSW	Bedroom 1	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	11	WNW	Bedroom 1	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	7	SSW	Bedroom 2	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	6.9	WNW	Bedroom 2	Yes	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **KUE1QLSM9C**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.2**



Building Features

1 : AFS - AFS 200mm (75mm Glasswool)	3.7	NNE	Bathroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.5	ESE	Bathroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.3	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	9.5	SSW	Kitchen/Living	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	10.9	ESE	Kitchen/Living	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	2.1	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	9	ESE	Kitchen/Living	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	57.9	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Entry	FR5 - 125mm concrete slab	7.5	Enclosed	R0.0	Tiles
Ensuite	FR5 - 125mm concrete slab	3.5	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - 125mm concrete slab	14.3	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 125mm concrete slab	10.6	Enclosed	R0.0	Tiles
Bathroom	FR5 - 125mm concrete slab	3.5	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 125mm concrete slab	36.7	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 125mm: 125mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: KUE1QLSM9C

Date of Certificate: 6 Jun 2019

★ Star rating: 6.2



Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **MZC4F2AO8S**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.8**



Assessor details

Accreditation number: **VIC/BDAV/14/1658**
Name: **Duncan Hope**
Organisation: **Senica Consultancy Group**
Email: **duncan@senica.com.au**
Phone: **61280067784**
Declaration of interest: **Employed by organisation constructing the building**
Software: **FirstRate5: 5.2.10b (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **603, 26 Whistler Street**
Suburb: **MANLY**
State: **NSW** Postcode: **2095**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **56**
Exposure: **open**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Insulation: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Glazing: **As indicated**
As indicated

Net floor area (m²)

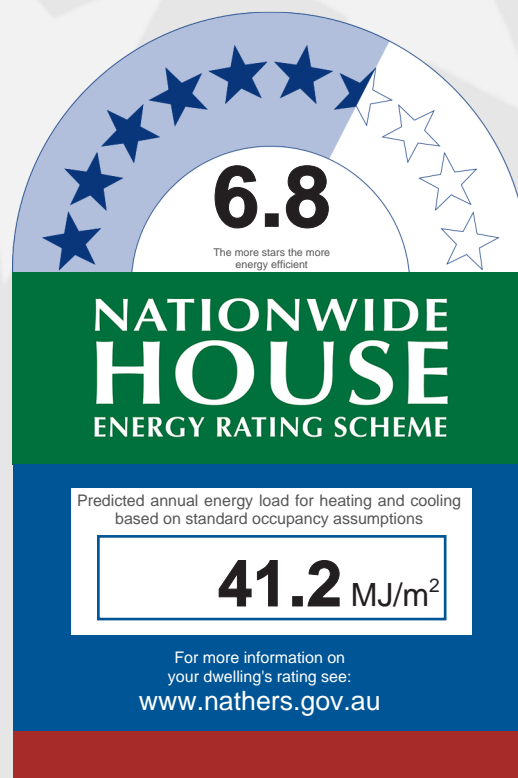
Conditioned: **118.8**
Unconditioned: **7.4**
Garage: **-**
TOTAL: **126.2**

Annual thermal performance loads (MJ/m²)

Heating: **19.2**
Cooling: **22**
TOTAL: **41.2**

Plan documents

Plan ref/date: **Project No. 21813**
Prepared by: **Wolski Coppin Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **0**
Unsealed: **0**
TOTAL:** **0**

Principal downlight type: **Compact fluorescent**

NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

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Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	bed 1 door	2100	920	NNE	Bedroom 1	No
ALM-002-01 A	bed 1	2100	1500	NNE	Bedroom 1	No
ALM-002-01 A	bed 2	2100	1300	ESE	Bedroom 2	No
ALM-002-01 A	bed 3	2100	1250	ESE	Bedroom 3	No
ALM-002-01 A	Opening 32	2100	2000	ESE	Kitchen/Living	No
ALM-002-01 A	lkitchen	2100	2473	NNE	Kitchen/Living	No
ALM-002-01 A	dining	2100	2750	ESE	Kitchen/Living	No
ALM-002-01 A	balcony	2100	4000	NNE	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	9.2	WNW	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.9	NNE	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.7	NNE	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	6	WNW	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	12.2	SSW	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	ESE	Bedroom 2	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	8.2	SSW	Bedroom 3	Yes	Yes

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Building Features

1 : AFS - AFS 162mm (75mm Glasswool)	6.1	ESE	Bedroom 3	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	1.5	NNE	Bedroom 3	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.9	ESE	Bedroom 3	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	8.3	WNW	ensuite 1	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	0.8	SSW	ensuite 1	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	5	WNW	bath	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.6	SSW	bath	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	0.7	NNE	bath	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.6	SSW	laundry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.9	WNW	entry	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	11.8	ESE	Kitchen/Living	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.5	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	7.5	ESE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	11	NNE	Kitchen/Living	Yes	Yes

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	100.9	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 150mm concrete slab	18.2	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 150mm concrete slab	18.2	Enclosed	R0.0	Tiles
Bedroom 3	FR5 - 150mm concrete slab	15.3	Enclosed	R0.0	Tiles
ensuite 1	FR5 - 150mm concrete slab	7.3	Enclosed	R0.0	Tiles
bath	FR5 - 150mm concrete slab	4	Enclosed	R0.0	Tiles
laundry	FR5 - 150mm concrete slab	3.4	Enclosed	R0.0	Tiles
entry	FR5 - 150mm concrete slab	10.9	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 150mm concrete slab	48.8	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Nationwide House Energy Rating Scheme* Certificate



Certificate Number: **MZC4F2AO8S**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.8**

Building Features

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **MZC4F2AO8S**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.8**



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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: NPNC9JWD90

Date of Certificate: 6 Jun 2019

★ Star rating: 6.4



Assessor details

Accreditation number: **VIC/BDAV/14/1658**
Name: **Duncan Hope**
Organisation: **Senica Consultancy Group**
Email: **duncan@senica.com.au**
Phone: **61280067784**
Declaration of interest: **Employed by organisation constructing the building**
Software: **FirstRate5: 5.2.10b (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **204, 26 Whistler Street**
Suburb: **MANLY**
State: **NSW** Postcode: **2095**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **56**
Exposure: **suburban**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Insulation: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Glazing: **As indicated**
As indicated

Net floor area (m²)

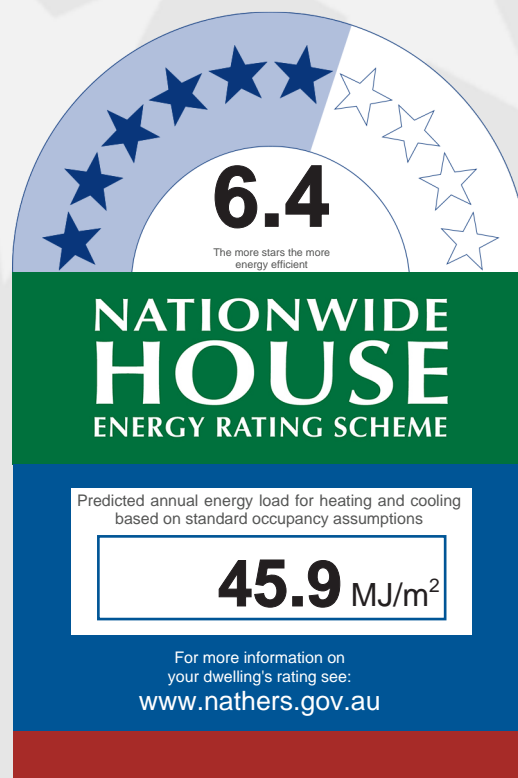
Conditioned: **74.2**
Unconditioned: **5.9**
Garage: **-**
TOTAL: **80.1**

Annual thermal performance loads (MJ/m²)

Heating: **24.4**
Cooling: **21.5**
TOTAL: **45.9**

Plan documents

Plan ref/date: **Project No. 21813**
Prepared by: **Wolski Coppin Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **0**
Unsealed: **0**
TOTAL:** **0**

Principal downlight type: **Compact fluorescent**

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

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Scan to access this certificate online and confirm this is valid.



<https://www.fr5.com.au/QRCodeLandIng?PublicId=NPNC9JWD90>

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: NPNC9JWD90

Date of Certificate: 6 Jun 2019

★ Star rating: 6.4



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	bed 1	2100	600	ESE	Bedroom 1	No
ALM-002-01 A	bed 1	2100	600	ESE	Bedroom 1	No
ALM-002-01 A	bed 2	2100	1600	SSW	Bedroom 2	No
ALM-002-01 A	kitchen	2100	300	WNW	Kitchen/Living	No
ALM-002-01 A	dining	2100	1800	WNW	Kitchen/Living	No
ALM-002-01 A	balcony	2100	2400	SSW	Kitchen/Living	No
ALM-002-01 A	living	2100	2800	WNW	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
----	---------------------------	------------------------	-------------	-----------	---------------	-----------------------

External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	8.6	SSW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.3	ESE	Bedroom 1	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.5	NNE	Bedroom 2	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	6.1	SSW	Bedroom 2	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	8.5	ESE	Bedroom 2	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.4	SSW	laundry	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.3	ESE	laundry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	4.6	NNE	laundry	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: NPNC9JWD90

Date of Certificate: 6 Jun 2019

★ Star rating: 6.4



Building Features

1 : AFS - AFS 200mm (75mm Glasswool)	3.4	WNW	bath	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.7	NNE	bath	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.5	WNW	entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.8	ESE	entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	8.5	WNW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	6.5	SSW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	8	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	9.1	SSW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	19.8	NNE	Kitchen/Living	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	64	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 150mm concrete slab	12.7	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 150mm concrete slab	12	Enclosed	R0.0	Carpet
laundry	FR5 - 150mm concrete slab	2.6	Enclosed	R0.0	Tiles
bath	FR5 - 150mm concrete slab	3.3	Enclosed	R0.0	Tiles
ensuite	FR5 - 150mm concrete slab	3.7	Enclosed	R0.0	Tiles
entry	FR5 - 150mm concrete slab	7.4	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 150mm concrete slab	38.5	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Nationwide House Energy Rating Scheme* Certificate



Certificate Number: **NPNC9JWD90**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.4**

Building Features

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: NPNC9JWD90

Date of Certificate: 6 Jun 2019

★ Star rating: 6.4



Additional information

Explanatory notes

About this report

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

General Information

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

Accredited Assessors

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

Disclaimer

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

Contact

For more information on the Nationwide House Energy Rating Scheme (NatHERS), visit www.nathers.gov.au

For more information on energy efficient design and insulation visit www.yourhome.gov.au

Nationwide House Energy Rating Scheme* Certificate



Certificate Number: NQ2EQSHOY1

Date of Certificate: 6 Jun 2019

★ Star rating: 6.1

Assessor details

Accreditation number: VIC/BDAV/14/1658
Name: Duncan Hope
Organisation: Senica Consultancy Group
Email: duncan@senica.com.au
Phone: 61280067784
Declaration of interest: Employed by organisation constructing the building
Software: FirstRate5: 5.2.10b (3.13)
AAO: BDAV

Overview

Dwelling details

Address: 702, 26 Whistler Street
Suburb: MANLY
State: NSW Postcode: 2095
Type: New Home NCC Class: Class 2
Lot/DP number: - NatHERS climate zone: 56
Exposure: open

Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated
Roof: As indicated
Floor: As indicated
Insulation: Wall: As indicated
Roof: As indicated
Floor: As indicated
Glazing: As indicated
As indicated

Net floor area (m²)

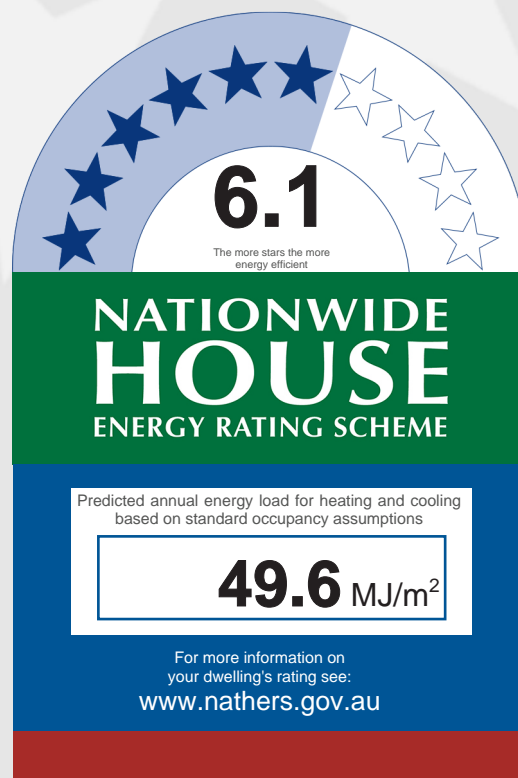
Conditioned: 132.6
Unconditioned: 3.7
Garage: -
TOTAL: 136.3

Annual thermal performance loads (MJ/m²)

Heating: 28.6
Cooling: 21
TOTAL: 49.6

Plan documents

Plan ref/date: Project No. 21813
Prepared by: Wolski Coppin Architecture



Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL:** 0

Principal downlight type: Compact fluorescent

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: NQ2EQSHOY1

Date of Certificate: 6 Jun 2019

★ Star rating: 6.1



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	bed 1	2100	2000	WNW	Bedroom 3	No
ALM-002-01 A	bed 2	2100	1600	SSW	Bedroom 1	No
ALM-002-01 A	balcony	2100	3500	WNW	Kitchen/Living	No
ALM-002-01 A	dining	2100	2500	WNW	Kitchen/Living	No
ALM-002-01 A	Opening 28	2100	500	SSW	Kitchen/Living	No
ALM-002-01 A	Opening 36	2100	950	SSW	Kitchen/Living	No
ALM-002-01 A	Opening 37	2100	950	SSW	Kitchen/Living	No
ALM-002-01 A	Opening 38	2100	1900	WNW	Bedroom 2	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	1.7	NNE	Bedroom 3	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.3	WNW	Bedroom 3	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	SSW	Bedroom 1	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	10.4	ESE	Bedroom 1	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	2.2	ESE	ensuite	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	NNE	ensuite	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.8	NNE	laundry	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **NQ2EQSHOY1**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.1**



Building Features

1 : AFS - AFS 162mm (75mm Glasswool)	4.3	NNE	entry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.1	ESE	entry	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	17.9	WNW	Kitchen/Living	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	2	SSW	Kitchen/Living	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	1.3	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	18.1	SSW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.9	ESE	Kitchen/Living	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.9	ESE	Ensuite	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.1	WNW	Bedroom 2	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.3	WNW	Bedroom 2	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	10.3	NNE	Bedroom 2	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	110.8	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 3	FR5 - 150mm concrete slab Lined	14.8	Enclosed	R0.0	Carpet
Bedroom 1	FR5 - 150mm concrete slab Lined	19.5	Enclosed	R0.0	Carpet
ensuite	FR5 - 150mm concrete slab Lined	3.8	Enclosed	R0.0	Tiles
laundry	FR5 - 150mm concrete slab Lined	2.3	Enclosed	R0.0	Tiles
bath	FR5 - 150mm concrete slab Lined	3.7	Enclosed	R0.0	Tiles
entry	FR5 - 150mm concrete slab Lined	9.8	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 150mm concrete slab Lined	61.8	Enclosed	R0.0	Tiles
Ensuite	FR5 - 125mm concrete slab	6.3	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 125mm concrete slab	14.3	Enclosed	R0.0	Carpet

Ceiling type

Location	Material	Added insulation	Roof space above
Bedroom 3	Plasterboard	R3.0	No
Bedroom 1	Plasterboard	R3.0	No
ensuite	Plasterboard	R3.0	No
laundry	Plasterboard	R3.0	No

Nationwide House Energy Rating Scheme* Certificate



Certificate Number: NQ2EQSHOY1

Date of Certificate: 6 Jun 2019

★ Star rating: 6.1

Building Features

bath	Plasterboard	R3.0	No
entry	Plasterboard	R3.0	No
Kitchen/Living	Plasterboard	R3.0	No
Ensuite	Plasterboard	R3.0	No
Bedroom 2	Plasterboard	R3.0	No

Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium
Slab:Slab - Suspended Slab : 125mm: 125mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: NQ2EQSHOY1

Date of Certificate: 6 Jun 2019

★ Star rating: 6.1



Additional information

Explanatory notes

About this report

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The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

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Contact

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For more information on energy efficient design and insulation visit www.yourhome.gov.au

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **OGYYM4AWRW**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.6**



Assessor details

Accreditation number: **VIC/BDAV/14/1658**
Name: **Duncan Hope**
Organisation: **Senica Consultancy Group**
Email: **duncan@senica.com.au**
Phone: **61280067784**
Declaration of interest: **Employed by organisation constructing the building**
Software: **FirstRate5: 5.2.10b (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **502, 26 Whistler Street**
Suburb: **MANLY**
State: **NSW** Postcode: **2095**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **56**
Exposure: **open**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Insulation: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Glazing: **As indicated**
As indicated

Net floor area (m²)

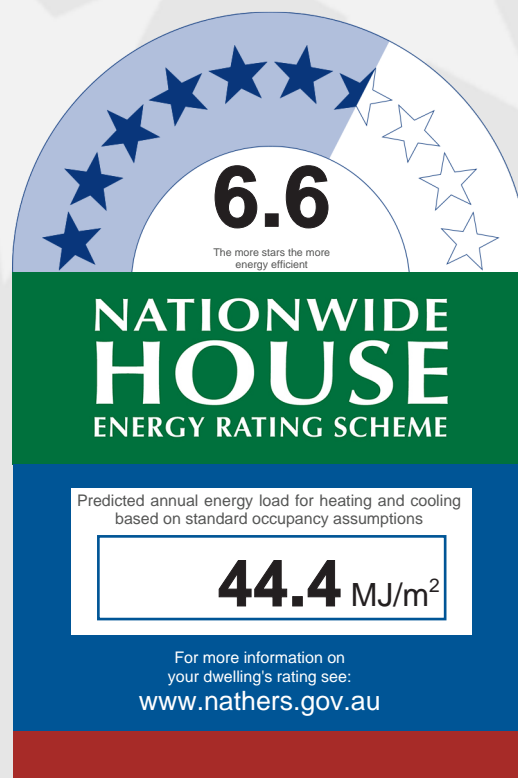
Conditioned: **90**
Unconditioned: **3.7**
Garage: **-**
TOTAL: **93.7**

Annual thermal performance loads (MJ/m²)

Heating: **28.8**
Cooling: **15.6**
TOTAL: **44.4**

Plan documents

Plan ref/date: **Project No. 21813**
Prepared by: **Wolski Coppin Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **0**
Unsealed: **0**
TOTAL:** **0**

Principal downlight type: **Compact fluorescent**

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

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Scan to access this certificate online and confirm this is valid.



<https://www.fr5.com.au/QRCodeLand ing?PublicId=OGYYM4AWRW>

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **OGYYM4AWRW**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.6**



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	bed 1	2100	2400	WNW	Bedroom 1	No
ALM-002-01 A	bed 2	2100	1600	SSW	Bedroom 2	No
ALM-002-01 A	study	2100	900	SSW	study	No
ALM-002-01 A	balcony	2100	3000	WNW	Kitchen/Living	No
ALM-002-01 A	living	2100	450	NNE	Kitchen/Living	No
ALM-002-01 A	dining	2100	2800	WNW	Kitchen/Living	No
ALM-002-01 A	Opening 27	2100	316	WNW	Kitchen/Living	No
ALM-002-01 A	Opening 28	2100	363	SSW	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
----	---------------------------	------------------------	-------------	-----------	---------------	-----------------------

External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No
2 : FR5 - Internal Plasterboard Stud Wall		No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	9.8	NNE	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.3	WNW	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	6	SSW	Bedroom 2	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	8.6	ESE	Bedroom 2	No	Yes
2 : FR5 - Internal Plasterboard Stud Wall	0.7	NNE	Bedroom 2	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.8	SSW	study	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **OGYYM4AWRW**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.6**



Building Features

1 : AFS - AFS 162mm (75mm Glasswool)	7.3	ESE	study	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.7	NNE	ensuite	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.2	NNE	laundry	No	No
2 : FR5 - Internal Plasterboard Stud Wall	0.7	SSW	bath	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.5	ESE	bath	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.8	NNE	bath	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	ESE	entry	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	8.3	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	2.6	NNE	Kitchen/Living	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	8.2	WNW	Kitchen/Living	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	2	SSW	Kitchen/Living	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	1.3	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	12	SSW	Kitchen/Living	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	77.8	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 150mm concrete slab Lined	13.6	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 150mm concrete slab Lined	10.5	Enclosed	R0.0	Carpet
study	FR5 - 150mm concrete slab Lined	10.3	Enclosed	R0.0	Carpet
ensuite	FR5 - 150mm concrete slab Lined	3.8	Enclosed	R0.0	Tiles
laundry	FR5 - 150mm concrete slab Lined	2.5	Enclosed	R0.0	Tiles
bath	FR5 - 150mm concrete slab Lined	3.7	Enclosed	R0.0	Tiles
entry	FR5 - 150mm concrete slab Lined	7.6	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 150mm concrete slab Lined	41.7	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **OGYYM4AWRW**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.6**



Building Features

Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **OGYYM4AWRW**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.6**



Additional information

Explanatory notes

About this report

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **PEOL931SYU**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.3**



Assessor details

Accreditation number: **VIC/BDAV/14/1658**
Name: **Duncan Hope**
Organisation: **Senica Consultancy Group**
Email: **duncan@senica.com.au**
Phone: **61280067784**
Declaration of interest: **Employed by organisation constructing the building**
Software: **FirstRate5: 5.2.10b (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **107, 26 Whistler Street**
Suburb: **MANLY**
State: **NSW** Postcode: **2095**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **56**
Exposure: **suburban**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Insulation: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Glazing: **As indicated**
As indicated

Net floor area (m²)

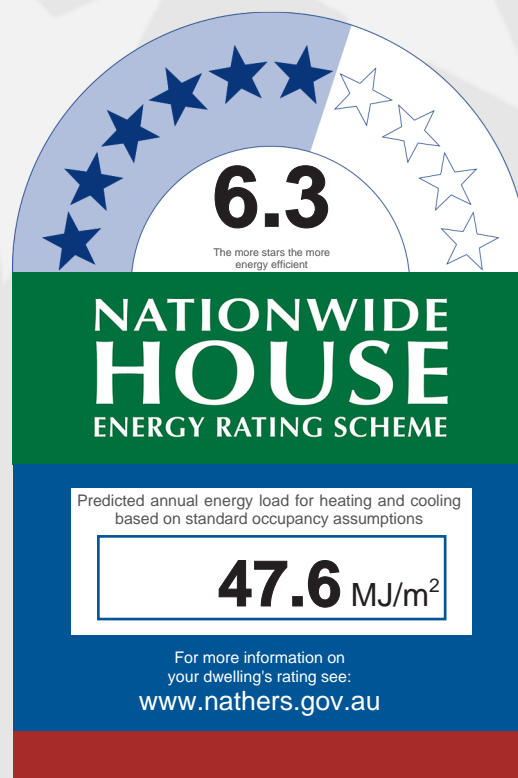
Conditioned: **72.5**
Unconditioned: **4.1**
Garage: **-**
TOTAL: **76.6**

Annual thermal performance loads (MJ/m²)

Heating: **30.3**
Cooling: **17.3**
TOTAL: **47.6**

Plan documents

Plan ref/date: **Project No. 21813**
Prepared by: **Wolski Coppin Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **0**
Unsealed: **0**
TOTAL:** **0**

Principal downlight type: **Compact fluorescent**

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



<https://www.fr5.com.au/QRCodeLand ing?PublicId=PEOL931SYU>

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **PEOL931SYU**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.3**



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	21.12SD	2100	1200	ESE	Bedroom 1	No
ALM-002-01 A	Opening 9	1500	3000	ESE	Bedroom 2	No
ALM-002-01 A	21.36SD	2100	3600	ESE	Kitchen/Living	No
ALM-002-01 A	Opening 10	1500	1200	NNE	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	1.7	SSW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.7	SSW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.6	ESE	Bedroom 1	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	0.4	WNW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	8.7	WNW	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.6	ESE	Bedroom 2	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	2.1	NNE	Bedroom 2	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	5.9	SSW	Bedroom 2	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.4	WNW	Ensuite	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.3	SSW	Ensuite	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3	SSW	Kitchen/Living	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **PEOL931SYU**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.3**



Building Features

1 : AFS - AFS 200mm (75mm Glasswool)	10	ESE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	18.9	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	1.2	WNW	Bathroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.8	NNE	Bathroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.6	WNW	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	10.9	SSW	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.4	WNW	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.8	SSW	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	2.4	NNE	Entry	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.6	WNW	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.1	NNE	Entry	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	49.5	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 125mm concrete slab	13.6	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 125mm concrete slab	11.2	Enclosed	R0.0	Tiles
Ensuite	FR5 - 125mm concrete slab	3.1	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 125mm concrete slab	34.5	Enclosed	R0.0	Tiles
Bathroom	FR5 - 125mm concrete slab	4.1	Enclosed	R0.0	Tiles
Entry	FR5 - 125mm concrete slab	10.1	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **PEOL931SYU**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.3**



Building Features

Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 125mm: 125mm Suspended Slab	0.0	medium

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Date of Certificate: **6 Jun 2019**

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Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: Q7AT0WRPAC

Date of Certificate: 6 Jun 2019

★ Star rating: 5.5



Assessor details

Accreditation number: **VIC/BDAV/14/1658**
Name: **Duncan Hope**
Organisation: **Senica Consultancy Group**
Email: **duncan@senica.com.au**
Phone: **61280067784**
Declaration of interest: **Employed by organisation constructing the building**
Software: **FirstRate5: 5.2.10b (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **108, 26 Whistler Street**
Suburb: **MANLY**
State: **NSW** Postcode: **2095**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **56**
Exposure: **suburban**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Insulation: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Glazing: **As indicated**
As indicated

Net floor area (m²)

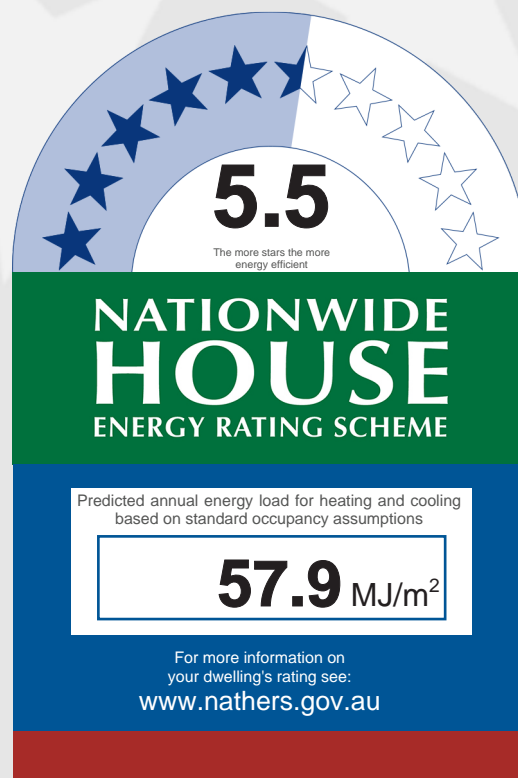
Conditioned: **72.6**
Unconditioned: **3.5**
Garage: **-**
TOTAL: **76.1**

Annual thermal performance loads (MJ/m²)

Heating: **34.9**
Cooling: **23**
TOTAL: **57.9**

Plan documents

Plan ref/date: **Project No. 21813**
Prepared by: **Wolski Coppin Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **0**
Unsealed: **0**
TOTAL:** **0**

Principal downlight type: **Compact fluorescent**

NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

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Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	21.135SW	2100	1350	SSW	Bedroom 1	No
ALM-002-01 A	21.045FW	2100	450	WNW	Bedroom 1	No
ALM-002-01 A	21.095SW	2100	950	SSW	Bedroom 2	No
ALM-002-01 A	21.045FW	2100	450	WNW	Bedroom 2	No
ALM-002-01 A	Opening 13	1500	2100	SSW	Kitchen/Living	No
ALM-002-01 A	Opening 14	1500	1300	SSW	Kitchen/Living	No
ALM-002-01 A	21.45SD	2100	4500	ESE	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	4	WNW	Entry	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	10.7	NNE	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.4	WNW	Ensuite	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	0.7	NNE	Ensuite	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.5	SSW	Bedroom 1	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	11	WNW	Bedroom 1	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	7	SSW	Bedroom 2	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	6.9	WNW	Bedroom 2	Yes	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **Q7AT0WRPAC**

Date of Certificate: **6 Jun 2019**

★ Star rating: **5.5**



Building Features

1 : AFS - AFS 200mm (75mm Glasswool)	3.7	NNE	Bathroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.5	ESE	Bathroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.3	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	9.5	SSW	Kitchen/Living	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	10.9	ESE	Kitchen/Living	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	2.1	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	9	ESE	Kitchen/Living	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	57.9	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Entry	FR5 - 125mm concrete slab	7.5	Enclosed	R0.0	Tiles
Ensuite	FR5 - 125mm concrete slab	3.5	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - 125mm concrete slab	14.3	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 125mm concrete slab	10.6	Enclosed	R0.0	Tiles
Bathroom	FR5 - 125mm concrete slab	3.5	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 125mm concrete slab	36.7	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 125mm: 125mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: Q7AT0WRPAC

Date of Certificate: 6 Jun 2019

★ Star rating: 5.5



Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **R5RY8MPGRX**

Date of Certificate: **6 Jun 2019**

★ Star rating: **5.8**



Assessor details

Accreditation number: **VIC/BDAV/14/1658**
Name: **Duncan Hope**
Organisation: **Senica Consultancy Group**
Email: **duncan@senica.com.au**
Phone: **61280067784**
Declaration of interest: **Employed by organisation constructing the building**
Software: **FirstRate5: 5.2.10b (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **103, 26 Whistler Street**
Suburb: **MANLY**
State: **NSW** Postcode: **2095**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **56**
Exposure: **suburban**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Insulation: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Glazing: **As indicated**
As indicated

Net floor area (m²)

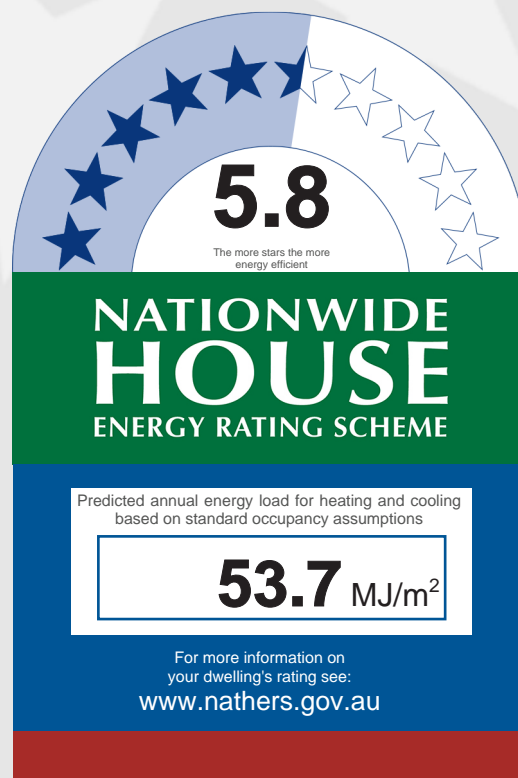
Conditioned: **49.7**
Unconditioned: **3.8**
Garage: **-**
TOTAL: **53.5**

Annual thermal performance loads (MJ/m²)

Heating: **33.2**
Cooling: **20.5**
TOTAL: **53.7**

Plan documents

Plan ref/date: **Project No. 21813**
Prepared by: **Wolski Coppin Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **0**
Unsealed: **0**
TOTAL:** **0**

Principal downlight type: **Compact fluorescent**

NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

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Scan to access this certificate online and confirm this is valid.



<https://www.fr5.com.au/QRCodeLand ing?PublicId=R5RY8MPGRX>

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **R5RY8MPGRX**

Date of Certificate: **6 Jun 2019**

★ Star rating: **5.8**



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	bed 1	2100	2100	WNW	Bedroom 1	No
ALM-002-01 A	living	2100	2000	WNW	Kitchen/Living	No
ALM-002-01 A	living	2100	3200	NNE	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
----	---------------------------	------------------------	-------------	-----------	---------------	-----------------------

External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	5.7	WNW	Bedroom 1	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	9.4	NNE	Bedroom 1	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.8	NNE	bath	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.6	SSW	Study	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.4	ESE	Study	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	6.5	NNE	Study	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	9.5	SSW	entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.8	ESE	entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	9	WNW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	19.6	SSW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.2	ESE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	0.8	SSW	Kitchen/Living	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **R5RY8MPGRX**

Date of Certificate: **6 Jun 2019**

★ Star rating: **5.8**



Building Features

1 : AFS - AFS 200mm (75mm Glasswool) 8.3 NNE Kitchen/Living Yes Yes

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	38.3	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 150mm concrete slab	11.3	Enclosed	R0.0	Carpet
bath	FR5 - 150mm concrete slab	3.8	Enclosed	R0.0	Tiles
Study	FR5 - 150mm concrete slab	4.3	Enclosed	R0.0	Tiles
entry	FR5 - 150mm concrete slab	5.7	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 150mm concrete slab	28.4	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **R5RY8MPGRX**

Date of Certificate: **6 Jun 2019**

★ Star rating: **5.8**



Additional information

Explanatory notes

About this report

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

General Information

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

Accredited Assessors

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

Disclaimer

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

Contact

For more information on the Nationwide House Energy Rating Scheme (NatHERS), visit www.nathers.gov.au

For more information on energy efficient design and insulation visit www.yourhome.gov.au

Nationwide House Energy Rating Scheme* Certificate



Certificate Number: **S3Y6YQA67W**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.2**

Assessor details

Accreditation number: **VIC/BDAV/14/1658**
Name: **Duncan Hope**
Organisation: **Senica Consultancy Group**
Email: **duncan@senica.com.au**
Phone: **61280067784**
Declaration of interest: **Employed by organisation constructing the building**
Software: **FirstRate5: 5.2.10b (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **402, 26 Whistler Street**
Suburb: **MANLY**
State: **NSW** Postcode: **2095**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **56**
Exposure: **suburban**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Insulation: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Glazing: **As indicated**
As indicated

Net floor area (m²)

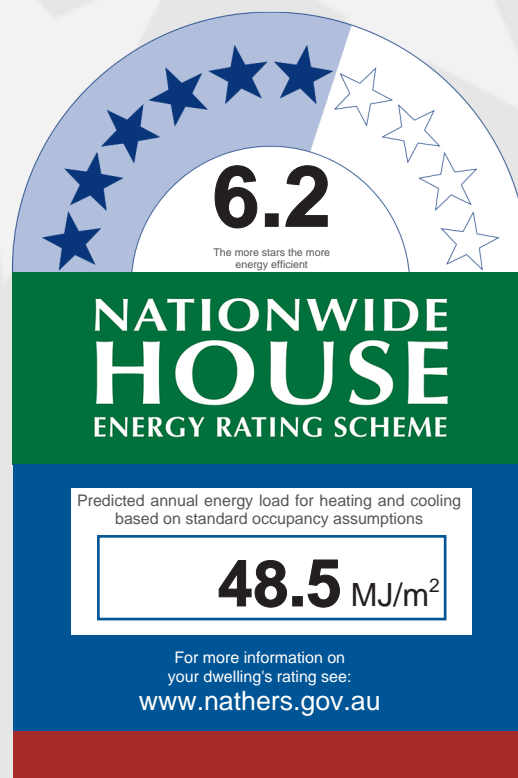
Conditioned: **77.8**
Unconditioned: **1.3**
Garage: **-**
TOTAL: **79.1**

Annual thermal performance loads (MJ/m²)

Heating: **19.9**
Cooling: **28.6**
TOTAL: **48.5**

Plan documents

Plan ref/date: **Project No. 21813**
Prepared by: **Wolski Coppin Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **0**
Unsealed: **0**
TOTAL:** **0**

Principal downlight type: **Compact fluorescent**

NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **S3Y6YQA67W**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.2**



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	Opening 41	2100	4500	WNW	Kitchen/Living	No
ALM-002-01 A	Opening 46	2100	1800	WNW	Bedroom 1	No
ALM-002-01 A	Opening 47	2100	1500	WNW	Bedroom 2	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	14.5	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	13.3	SSW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.2	ESE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	17	NNE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.9	SSW	WC	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.5	SSW	Entry Laundry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.4	ESE	Entry Laundry	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	1.1	NNE	Entry Laundry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.6	ESE	Entry Laundry	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	8.2	NNE	Entry Laundry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.9	WNW	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	1.8	NNE	Bedroom 1	Yes	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **S3Y6YQA67W**

Date of Certificate: **6 Jun 2019**

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Building Features

1 : AFS - AFS 162mm (75mm Glasswool)	6.9	WNW	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	9.8	SSW	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	6.2	NNE	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	6.2	SSW	Ensuite	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.4	WNW	Bedroom 2	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	7.1	ESE	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	12.1	NNE	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	8.4	SSW	Day 7	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.1	NNE	Day 7	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4	SSW	Day 8	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7	ESE	Day 8	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4	NNE	Day 8	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	54.8	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	FR5 - 125mm concrete slab	30.2	Enclosed	R0.0	Tiles
WC	FR5 - 125mm concrete slab	1.3	Enclosed	R0.0	Tiles
Entry Laundry	FR5 - 125mm concrete slab	9.8	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - 125mm concrete slab	12	Enclosed	R0.0	Carpet
Bedroom 1	FR5 - 125mm concrete slab	3	Elevated	R0.0	Tiles
Ensuite	FR5 - 125mm concrete slab	3.4	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 125mm concrete slab	10.9	Enclosed	R0.0	Carpet
Day 7	FR5 - 125mm concrete slab	8.1	Enclosed	R0.0	Carpet
Day 8	FR5 - 125mm concrete slab	0.4	Elevated	R0.0	Tiles
Day 8	FR5 - 125mm concrete slab	3.4	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
Kitchen/Living	FR5 - 125mm concrete slab	R0.0	No
Kitchen/Living	FR5 - 125mm concrete slab	R0.0	No

Nationwide House Energy Rating Scheme* Certificate



Certificate Number: **S3Y6YQA67W**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.2**

Building Features

Kitchen/Living	FR5 - 125mm concrete slab	R0.0	No
Kitchen/Living	Plasterboard	R0.0	No
WC	FR5 - 125mm concrete slab	R0.0	No
Entry Laundry	FR5 - 125mm concrete slab	R0.0	No
Entry Laundry	FR5 - 125mm concrete slab	R0.0	No

Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 125mm: 125mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **S3Y6YQA67W**

Date of Certificate: **6 Jun 2019**

★ Star rating: **6.2**



Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate



Certificate Number: TQ57SCWA33

Date of Certificate: 6 Jun 2019

★ Star rating: 7.3

Assessor details

Accreditation number: VIC/BDAV/14/1658
Name: Duncan Hope
Organisation: Senica Consultancy Group
Email: duncan@senica.com.au
Phone: 61280067784
Declaration of interest: Employed by organisation constructing the building
Software: FirstRate5: 5.2.10b (3.13)
AAO: BDAV

Overview

Dwelling details

Address: 302, 26 Whistler Street
Suburb: MANLY
State: NSW Postcode: 2095
Type: New Home NCC Class: Class 2
Lot/DP number: - NatHERS climate zone: 56
Exposure: suburban

Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated
Roof: As indicated
Floor: As indicated
Insulation: Wall: As indicated
Roof: As indicated
Floor: As indicated
Glazing: As indicated
As indicated

Net floor area (m²)

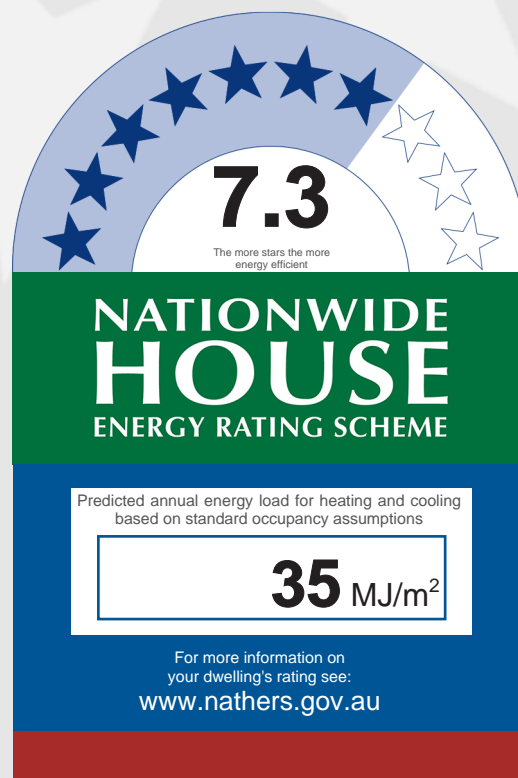
Conditioned: 81.4
Unconditioned: 3.5
Garage: -
TOTAL: 84.9

Annual thermal performance loads (MJ/m²)

Heating: 16.6
Cooling: 18.4
TOTAL: 35

Plan documents

Plan ref/date: Project No. 21813
Prepared by: Wolski Coppin Architecture



Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL:** 0

Principal downlight type: Compact fluorescent

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **TQ57SCWA33**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.3**



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	Opening 33	2100	4220	WNW	Kitchen/Living 4	No
ALM-002-01 A	Opening 30	2100	775	WNW	Bedroom 2	No
ALM-002-01 A	Opening 31	2100	1500	SSW	Bedroom 2	No
ALM-002-01 A	Opening 32	2100	1500	WNW	Bedroom 1	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	4.7	SSW	Day 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4	SSW	Day 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.9	ESE	Day 2	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	0.6	NNE	Day 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	0.5	ESE	Day 3	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	0.6	NNE	Day 3	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.8	ESE	Day 3	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	10.4	NNE	Day 3	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	13.3	WNW	Kitchen/Living 4	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	5.6	SSW	Kitchen/Living 4	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	12.2	SSW	Kitchen/Living 4	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **TQ57SCWA33**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.3**



Building Features

1 : AFS - AFS 162mm (75mm Glasswool)	3.8	ESE	Kitchen/Living 4	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	15.8	NNE	Kitchen/Living 4	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	8.3	WNW	Bedroom 2	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.8	SSW	Bedroom 2	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	12.7	NNE	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.6	WNW	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	15.3	SSW	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.6	ESE	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.6	SSW	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	6.3	SSW	Ensuite	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.5	ESE	Ensuite	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.8	ESE	Upstairs Bath	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	5.2	NNE	Upstairs Bath	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	10.9	NNE	Upstairs	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	64	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Day 1	FR5 - 125mm concrete slab	2.5	Enclosed	R0.0	Tiles
Day 2	FR5 - 125mm concrete slab	1.6	Enclosed	R0.0	Tiles
Day 3	FR5 - 125mm concrete slab	7.9	Enclosed	R0.0	Tiles
Kitchen/Living 4	FR5 - 125mm concrete slab	1.4	Enclosed	R0.0	Tiles
Kitchen/Living 4	FR5 - 125mm concrete slab	29.5	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 125mm concrete slab	10.1	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 125mm concrete slab	2.2	Elevated	R0.0	Carpet
Bedroom 1	FR5 - 125mm concrete slab	16.9	Enclosed	R0.0	Carpet
Ensuite	FR5 - 125mm concrete slab	3.9	Enclosed	R0.0	Tiles
Upstairs Bath	FR5 - 125mm concrete slab	3.5	Enclosed	R0.0	Tiles
Upstairs	FR5 - 125mm concrete slab	7.1	Enclosed	R0.0	Tiles

Ceiling type

Nationwide House Energy Rating Scheme* Certificate



Certificate Number: **TQ57SCWA33**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.3**

Building Features

Location	Material	Added insulation	Roof space above
Day 1	FR5 - 125mm concrete slab	R0.0	No
Day 1	FR5 - 125mm concrete slab	R0.0	No
Day 2	FR5 - 125mm concrete slab	R0.0	No
Day 3	FR5 - 125mm concrete slab	R0.0	No
Day 3	FR5 - 125mm concrete slab	R0.0	No
Day 3	FR5 - 125mm concrete slab	R0.0	No
Day 3	FR5 - 125mm concrete slab	R0.0	No
Kitchen/Living 4	Plasterboard	R3.0	No
Kitchen/Living 4	FR5 - 125mm concrete slab	R0.0	No
Kitchen/Living 4	FR5 - 125mm concrete slab	R0.0	No
Kitchen/Living 4	FR5 - 125mm concrete slab	R0.0	No

Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 125mm: 125mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **TQ57SCWA33**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.3**



Additional information

Explanatory notes

About this report

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: TVF7GJYSWT

Date of Certificate: 6 Jun 2019

★ Star rating: 7.3



Assessor details

Accreditation number: VIC/BDAV/14/1658
Name: Duncan Hope
Organisation: Senica Consultancy Group
Email: duncan@senica.com.au
Phone: 61280067784
Declaration of interest: Employed by organisation constructing the building
Software: FirstRate5: 5.2.10b (3.13)
AAO: BDAV

Overview

Dwelling details

Address: 203, 26 Whistler Street
Suburb: MANLY
State: NSW Postcode: 2095
Type: New Home NCC Class: Class 2
Lot/DP number: - NatHERS climate zone: 56
Exposure: suburban

Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated
Roof: As indicated
Floor: As indicated
Insulation: Wall: As indicated
Roof: As indicated
Floor: As indicated
Glazing: As indicated
As indicated

Net floor area (m²)

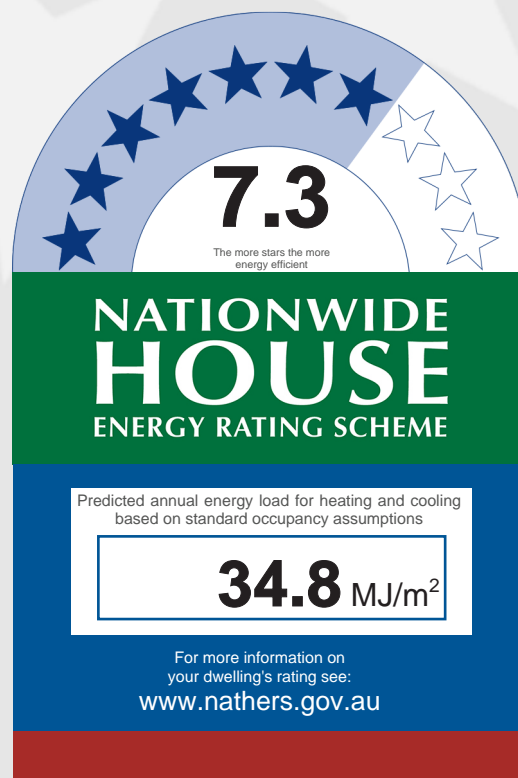
Conditioned: 75.4
Unconditioned: 3.8
Garage: -
TOTAL: 79.2

Annual thermal performance loads (MJ/m²)

Heating: 11.6
Cooling: 23.2
TOTAL: 34.8

Plan documents

Plan ref/date: Project No. 21813
Prepared by: Wolski Coppin Architecture



Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL:** 0

Principal downlight type: Compact fluorescent

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: TVF7GJYSWT

Date of Certificate: 6 Jun 2019

★ Star rating: 7.3



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	bed 1	2100	1400	WNW	Bedroom 1	No
ALM-002-01 A	bed 2	2100	2900	WNW	Bedroom 2	No
ALM-002-01 A	living	2100	1880	WNW	Kitchen/Living	No
ALM-002-01 A	balcony	2100	2800	NNE	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser
----	---------------------------	------------------------	-------------	-----------	---------------	------------------------

External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	3.6	WNW	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	1.1	NNE	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.5	WNW	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	2.3	ESE	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	8.7	NNE	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.2	WNW	Bedroom 2	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.5	ESE	ensuite	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.9	NNE	ensuite	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.4	NNE	bath	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	10.3	SSW	entry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.5	ESE	entry	No	Yes

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: TVF7GJYSWT

Date of Certificate: 6 Jun 2019

★ Star rating: 7.3



Building Features

1 : AFS - AFS 162mm (75mm Glasswool)	0.5	SSW	entry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.1	ESE	entry	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.6	NNE	entry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2	ESE	hallway	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	9.5	WNW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	19.7	SSW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.2	ESE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.6	NNE	Kitchen/Living	Yes	Yes

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	61.9	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 150mm concrete slab	13.5	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 150mm concrete slab	12.2	Enclosed	R0.0	Carpet
ensuite	FR5 - 150mm concrete slab	3.8	Enclosed	R0.0	Tiles
bath	FR5 - 150mm concrete slab	3.8	Enclosed	R0.0	Tiles
entry	FR5 - 150mm concrete slab	9.4	Enclosed	R0.0	Tiles
hallway	FR5 - 150mm concrete slab	3.8	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 150mm concrete slab	32.6	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Nationwide House Energy Rating Scheme* Certificate



Certificate Number: TVF7GJYSWT

Date of Certificate: 6 Jun 2019

★ Star rating: 7.3

Building Features

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: TVF7GJYSWT

Date of Certificate: 6 Jun 2019

★ Star rating: 7.3



Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: V2JL89NDSH

Date of Certificate: 6 Jun 2019

★ Star rating: 7.9



Assessor details

Accreditation number: VIC/BDAV/14/1658
Name: Duncan Hope
Organisation: Senica Consultancy Group
Email: duncan@senica.com.au
Phone: 61280067784
Declaration of interest: Employed by organisation constructing the building
Software: FirstRate5: 5.2.10b (3.13)
AAO: BDAV

Overview

Dwelling details

Address: 305, 26 Whistler Street
Suburb: MANLY
State: NSW Postcode: 2095
Type: New Home NCC Class: Class 2
Lot/DP number: - NatHERS climate zone: 56
Exposure: suburban

Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated
Roof: As indicated
Floor: As indicated
Insulation: Wall: As indicated
Roof: As indicated
Floor: As indicated
Glazing: As indicated
As indicated

Net floor area (m²)

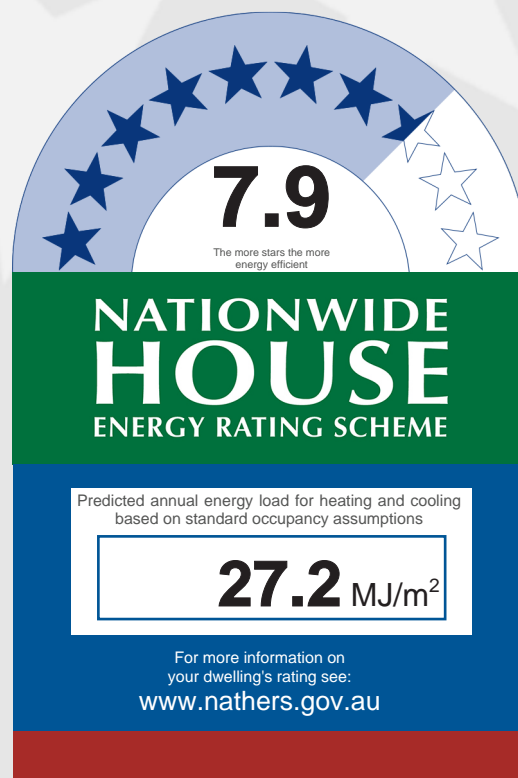
Conditioned: 97
Unconditioned: 6.5
Garage: -
TOTAL: 103.5

Annual thermal performance loads (MJ/m²)

Heating: 13.2
Cooling: 14
TOTAL: 27.2

Plan documents

Plan ref/date: Project No. 21813
Prepared by: Wolski Coppin Architecture



Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL:** 0

Principal downlight type: Compact fluorescent

NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: V2JL89NDSH

Date of Certificate: 6 Jun 2019

★ Star rating: 7.9



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	bed 1 door	2100	920	NNE	Bedroom 1	No
ALM-002-01 A	bed 1	2100	1500	NNE	Bedroom 1	No
ALM-002-01 A	bed 2	2100	1300	ESE	Bedroom 2	No
ALM-002-01 A	bed 3	2100	800	ESE	Bedroom 3	No
ALM-002-01 A	living	2100	800	WNW	Kitchen/Living	No
ALM-002-01 A	lkitchen	2100	900	ESE	Kitchen/Living	No
ALM-002-01 A	balcony	2100	4000	NNE	Kitchen/Living	No
ALM-002-01 A	dining	2100	2100	NNE	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	7.8	WNW	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.3	NNE	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.7	NNE	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	8.9	SSW	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.9	ESE	Bedroom 2	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	7.2	SSW	Bedroom 3	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.7	ESE	Bedroom 3	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **V2JL89NDSH**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.9**



Building Features

1 : AFS - AFS 162mm (75mm Glasswool)	1.5	NNE	Bedroom 3	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.1	ESE	Bedroom 3	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.3	SSW	ensuite 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	WNW	ensuite 1	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	0.6	SSW	ensuite 1	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.5	WNW	bath	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.4	SSW	bath	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	0.6	NNE	bath	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.2	SSW	laundry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	WNW	entry	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	2.9	WNW	Kitchen/Living	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	1	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	3.2	ESE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	0.9	NNE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	10.3	ESE	Kitchen/Living	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	16.4	NNE	Kitchen/Living	No	Yes

Internal wall type

Type	Area (m ²)	Insulation
1 : AFS - AFS 162mm (75mm Glasswool)	5.2	Rockwool batt (k = 0.033) (R2.3)
2 : FR5 - Internal Plasterboard Stud Wall	92.8	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 150mm concrete slab	15.1	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 150mm concrete slab	12.9	Enclosed	R0.0	Tiles
Bedroom 3	FR5 - 150mm concrete slab	10.9	Enclosed	R0.0	Tiles
ensuite 2	FR5 - 150mm concrete slab	3.3	Enclosed	R0.0	Tiles
ensuite 1	FR5 - 150mm concrete slab	4.7	Enclosed	R0.0	Tiles
bath	FR5 - 150mm concrete slab	3.5	Enclosed	R0.0	Tiles
laundry	FR5 - 150mm concrete slab	3	Enclosed	R0.0	Tiles
entry	FR5 - 150mm concrete slab	4.5	Enclosed	R0.0	Tiles
hallway	FR5 - 150mm concrete slab	5.6	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 150mm concrete slab	40.1	Enclosed	R0.0	Tiles

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **V2JL89NDSH**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.9**



Building Features

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
----------	--------	---------------

Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: V2JL89NDSH

Date of Certificate: 6 Jun 2019

★ Star rating: 7.9



Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: VGRKLUD0Z

Date of Certificate: 6 Jun 2019

★ Star rating: 7.5



Assessor details

Accreditation number: VIC/BDAV/14/1658
Name: Duncan Hope
Organisation: Senica Consultancy Group
Email: duncan@senica.com.au
Phone: 61280067784
Declaration of interest: Employed by organisation constructing the building
Software: FirstRate5: 5.2.10b (3.13)
AAO: BDAV

Overview

Dwelling details

Address: 201, 26 Whistler Street
Suburb: MANLY
State: NSW Postcode: 2095
Type: New Home NCC Class: Class 2
Lot/DP number: - NatHERS climate zone: 56
Exposure: suburban

Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated
Roof: As indicated
Floor: As indicated
Insulation: Wall: As indicated
Roof: As indicated
Floor: As indicated
Glazing: As indicated
As indicated

Net floor area (m²)

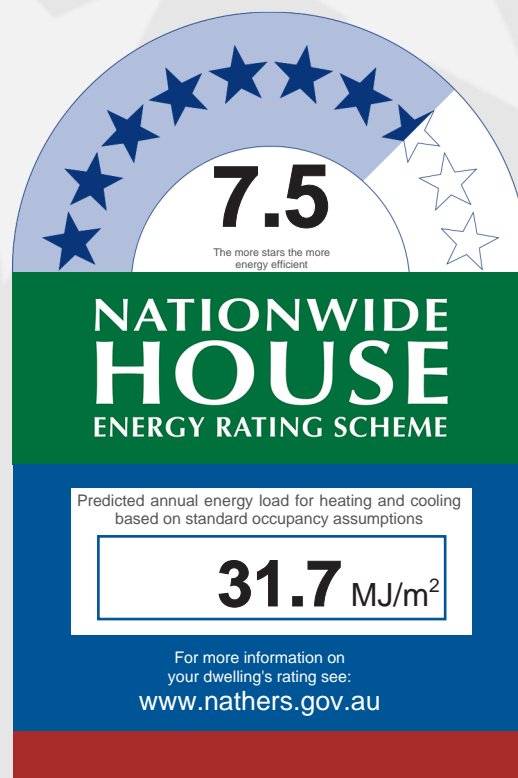
Conditioned: 79.9
Unconditioned: 3.8
Garage: -
TOTAL: 83.7

Annual thermal performance loads (MJ/m²)

Heating: 15.3
Cooling: 16.4
TOTAL: 31.7

Plan documents

Plan ref/date: Project No. 21813
Prepared by: Wolski Coppin Architecture



Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL:** 0

Principal downlight type: Compact fluorescent

NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: VGRKLUYD0Z

Date of Certificate: 6 Jun 2019

★ Star rating: 7.5



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	Opening 12	2100	1919	NNE	Bedroom 1	No
ALM-002-01 A	21.22SD	2100	2711	WNW	Kitchen/Living	No
ALM-002-01 A	21.24sd	2100	2400	NNE	Kitchen/Living	No
ALM-002-01 A	Opening 9	2400	450	NNE	Kitchen/Living	No
ALM-002-01 A	24.19	2400	1900	WNW	Kitchen/Living	No
ALM-002-01 A	Opening 10	2400	450	SSW	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No
2 : Hebel - Hebel Partition Wall		No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	9.2	ESE	Bedroom 2	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	9.7	NNE	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.7	SSW	Entry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4	ESE	Entry	No	No
2 : Hebel - Hebel Partition Wall	2.5	SSW	Entry	No	No
2 : Hebel - Hebel Partition Wall	1.3	WNW	Entry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	9.9	ESE	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	6.1	NNE	Bedroom 1	Yes	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **VGRKLUYD0Z**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.5**



Building Features

2 : Hebel - Hebel Partition Wall	3.7	ESE	Ensuite	No	No
2 : Hebel - Hebel Partition Wall	0.6	SSW	Ensuite	No	No
2 : Hebel - Hebel Partition Wall	7.4	WNW	Bathroom	No	No
2 : Hebel - Hebel Partition Wall	3.8	SSW	Bathroom	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.6	SSW	Kitchen/Living	Yes	No
2 : Hebel - Hebel Partition Wall	11	SSW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	9.5	NNE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	8.5	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	8.1	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	2.2	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	1.2	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	5.6	WNW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	1.3	SSW	Kitchen/Living	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.4	WNW	Kitchen/Living	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	68.1	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 2	FR5 - 150mm concrete slab Lined	12.2	Enclosed	R0.0	Carpet
Entry	FR5 - 150mm concrete slab Lined	12	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - 150mm concrete slab Lined	10.3	Enclosed	R0.0	Carpet
Ensuite	FR5 - 150mm concrete slab Lined	4.7	Enclosed	R0.0	Tiles
Bathroom	FR5 - 150mm concrete slab Lined	3.8	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 150mm concrete slab Lined	40.8	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Nationwide House Energy Rating Scheme* Certificate



Certificate Number: **VGRKLUYD0Z**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.5**

Building Features

Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: VGRKLUYD0Z

Date of Certificate: 6 Jun 2019

★ Star rating: 7.5



Additional information

Explanatory notes

About this report

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General Information

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

Accredited Assessors

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Disclaimer

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Contact

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For more information on energy efficient design and insulation visit www.yourhome.gov.au

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **W27XLFKWM0**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.1**



Assessor details

Accreditation number: **VIC/BDAV/14/1658**
Name: **Duncan Hope**
Organisation: **Senica Consultancy Group**
Email: **duncan@senica.com.au**
Phone: **61280067784**
Declaration of interest: **Employed by organisation constructing the building**
Software: **FirstRate5: 5.2.10b (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **303, 26 Whistler Street**
Suburb: **MANLY**
State: **NSW** Postcode: **2095**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **56**
Exposure: **suburban**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Insulation: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Glazing: **As indicated**
As indicated

Net floor area (m²)

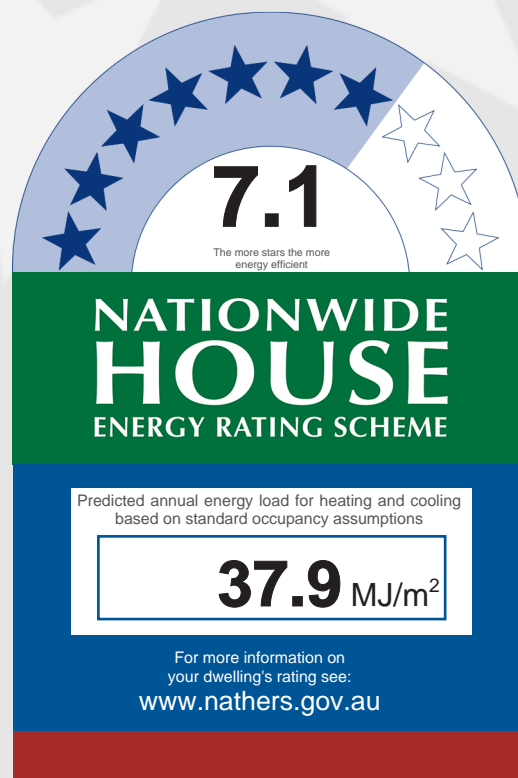
Conditioned: **67.5**
Unconditioned: **3.9**
Garage: **-**
TOTAL: **71.4**

Annual thermal performance loads (MJ/m²)

Heating: **18.5**
Cooling: **19.4**
TOTAL: **37.9**

Plan documents

Plan ref/date: **Project No. 21813**
Prepared by: **Wolski Coppin Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **0**
Unsealed: **0**
TOTAL:** **0**

Principal downlight type: **Compact fluorescent**

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **W27XLFKWM0**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.1**



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	bed 1	2100	1500	WNW	Bedroom 1	No
ALM-002-01 A	bed 2	2100	2850	WNW	Bedroom 2	No
ALM-002-01 A	bed 2	2100	2100	NNE	Bedroom 2	No
ALM-002-01 A	living	2100	2400	NNE	Kitchen/Living	No
ALM-002-01 A	living	2100	1941	WNW	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	3.8	WNW	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	6.2	ESE	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	10.6	NNE	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.5	WNW	Bedroom 2	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	5.4	NNE	Bedroom 2	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	3.3	NNE	ensuite	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	0.6	SSW	bath	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.8	ESE	bath	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.7	NNE	bath	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.2	SSW	entry	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **W27XLFKWM0**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.1**



Building Features

1 : AFS - AFS 162mm (75mm Glasswool)	1.7	WNW	entry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.9	SSW	entry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4	ESE	entry	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	1.2	SSW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	6.3	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	9.4	WNW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	19.5	SSW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.1	ESE	Kitchen/Living	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	50.1	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 150mm concrete slab	12.9	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 150mm concrete slab	11.3	Enclosed	R0.0	Carpet
laundry	FR5 - 150mm concrete slab	1.8	Enclosed	R0.0	Tiles
ensuite	FR5 - 150mm concrete slab	3.5	Enclosed	R0.0	Tiles
bath	FR5 - 150mm concrete slab	3.9	Enclosed	R0.0	Tiles
entry	FR5 - 150mm concrete slab	5.8	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 150mm concrete slab	32.3	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Nationwide House Energy Rating Scheme* Certificate



Certificate Number: **W27XLFKWM0**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.1**

Building Features

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **W27XLFKWM0**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.1**



Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **WQGYD43H8J**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.9**



Assessor details

Accreditation number: **VIC/BDAV/14/1658**
Name: **Duncan Hope**
Organisation: **Senica Consultancy Group**
Email: **duncan@senica.com.au**
Phone: **61280067784**
Declaration of interest: **Employed by organisation constructing the building**
Software: **FirstRate5: 5.2.10b (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **404, 26 Whistler Street**
Suburb: **MANLY**
State: **NSW** Postcode: **2095**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **56**
Exposure: **suburban**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Insulation: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Glazing: **As indicated**
As indicated

Net floor area (m²)

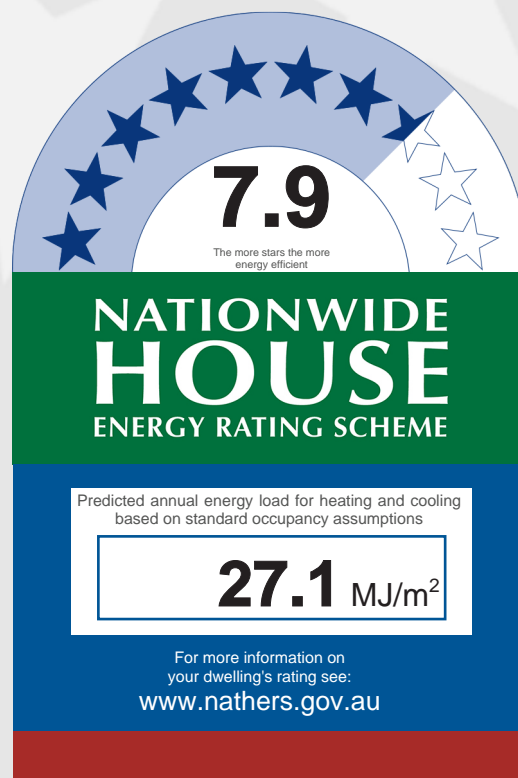
Conditioned: **97**
Unconditioned: **6.5**
Garage: **-**
TOTAL: **103.5**

Annual thermal performance loads (MJ/m²)

Heating: **13.8**
Cooling: **13.3**
TOTAL: **27.1**

Plan documents

Plan ref/date: **Project No. 21813**
Prepared by: **Wolski Coppin Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **0**
Unsealed: **0**
TOTAL:** **0**

Principal downlight type: **Compact fluorescent**

NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

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Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	bed 1 door	2100	920	NNE	Bedroom 1	No
ALM-002-01 A	bed 1	2100	1500	NNE	Bedroom 1	No
ALM-002-01 A	bed 2	2100	1300	ESE	Bedroom 2	No
ALM-002-01 A	bed 3	2100	800	ESE	Bedroom 3	No
ALM-002-01 A	living	2100	800	WNW	Kitchen/Living	No
ALM-002-01 A	lkitchen	2100	900	ESE	Kitchen/Living	No
ALM-002-01 A	balcony	2100	4000	NNE	Kitchen/Living	No
ALM-002-01 A	dining	2100	2100	NNE	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	7.8	WNW	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.3	NNE	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.7	NNE	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	8.9	SSW	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.9	ESE	Bedroom 2	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	7.2	SSW	Bedroom 3	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.7	ESE	Bedroom 3	No	No

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **WQGYD43H8J**

Date of Certificate: **6 Jun 2019**

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Building Features

1 : AFS - AFS 162mm (75mm Glasswool)	1.5	NNE	Bedroom 3	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.1	ESE	Bedroom 3	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.3	SSW	ensuite 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	WNW	ensuite 1	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	0.6	SSW	ensuite 1	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.5	WNW	bath	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.4	SSW	bath	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	0.6	NNE	bath	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.2	SSW	laundry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	WNW	entry	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	2.9	WNW	Kitchen/Living	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	1	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	3.2	ESE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	0.9	NNE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	10.3	ESE	Kitchen/Living	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	16.4	NNE	Kitchen/Living	No	Yes

Internal wall type

Type	Area (m ²)	Insulation
1 : AFS - AFS 162mm (75mm Glasswool)	5.2	Rockwool batt (k = 0.033) (R2.3)
2 : FR5 - Internal Plasterboard Stud Wall	92.8	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 150mm concrete slab	15.1	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 150mm concrete slab	12.9	Enclosed	R0.0	Tiles
Bedroom 3	FR5 - 150mm concrete slab	10.9	Enclosed	R0.0	Tiles
ensuite 2	FR5 - 150mm concrete slab	3.3	Enclosed	R0.0	Tiles
ensuite 1	FR5 - 150mm concrete slab	4.7	Enclosed	R0.0	Tiles
bath	FR5 - 150mm concrete slab	3.5	Enclosed	R0.0	Tiles
laundry	FR5 - 150mm concrete slab	3	Enclosed	R0.0	Tiles
entry	FR5 - 150mm concrete slab	4.5	Enclosed	R0.0	Tiles
hallway	FR5 - 150mm concrete slab	5.6	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 150mm concrete slab	40.1	Enclosed	R0.0	Tiles

Nationwide House Energy Rating Scheme* Certificate



Certificate Number: **WQGYD43H8J**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.9**

Building Features

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **WQGYD43H8J**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.9**



Additional information

Explanatory notes

About this report

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: Y8KDINLL2G

Date of Certificate: 6 Jun 2019

★ Star rating: 7.3



Assessor details

Accreditation number: **VIC/BDAV/14/1658**
Name: **Duncan Hope**
Organisation: **Senica Consultancy Group**
Email: **duncan@senica.com.au**
Phone: **61280067784**
Declaration of interest: **Employed by organisation constructing the building**
Software: **FirstRate5: 5.2.10b (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **501, 26 Whistler Street**
Suburb: **MANLY**
State: **NSW** Postcode: **2095**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **56**
Exposure: **open**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Insulation: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Glazing: **As indicated**
As indicated

Net floor area (m²)

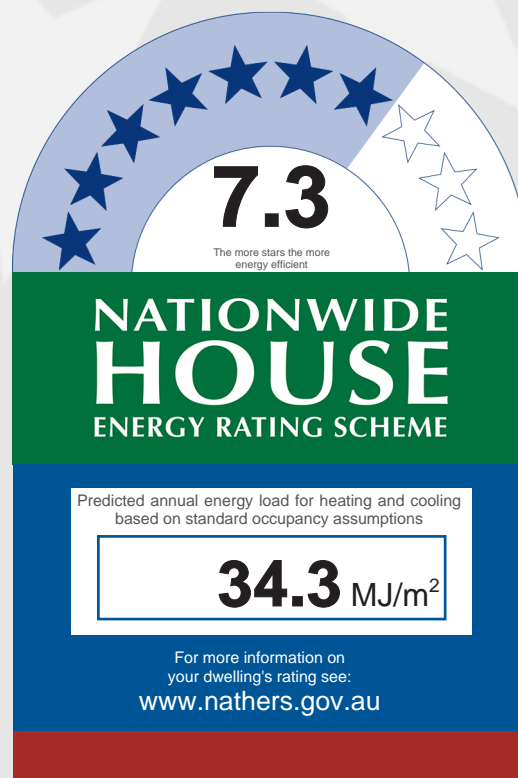
Conditioned: **110.8**
Unconditioned: **2.6**
Garage: **-**
TOTAL: **113.4**

Annual thermal performance loads (MJ/m²)

Heating: **17.3**
Cooling: **17**
TOTAL: **34.3**

Plan documents

Plan ref/date: **Project No. 21813**
Prepared by: **Wolski Coppin Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **0**
Unsealed: **0**
TOTAL:** **0**

Principal downlight type: **Compact fluorescent**

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: Y8KDINLL2G

Date of Certificate: 6 Jun 2019

★ Star rating: 7.3



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	Opening 60	2100	2700	NNE	Bedroom 1	No
ALM-002-01 A	Opening 63	2100	1500	WNW	Bedroom 3	No
ALM-002-01 A	Opening 62	2100	702	WNW	Bedroom 2	No
ALM-002-01 A	Opening 61	2100	1800	SSW	Bedroom 2	No
ALM-002-01 A	Opening 57	2100	2400	NNE	Kitchen/Living	No
ALM-002-01 A	Opening 64	2100	3000	WNW	Kitchen/Living	No
ALM-002-01 A	Opening 59	2100	3700	NNE	Kitchen/Living	No
ALM-002-01 A	Opening 58	2100	2720	WNW	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	10.5	ESE	Bedroom 1	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	9.3	NNE	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	8.8	ESE	Night 6	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.3	ESE	Entry	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.7	SSW	Bath	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.9	SSW	Laundry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.9	ESE	Laundry	No	Yes

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **Y8KDINLL2G**

Date of Certificate: **6 Jun 2019**

★ Star rating: **7.3**



Building Features

1 : AFS - AFS 162mm (75mm Glasswool)	0.7	NNE	Bedroom 3	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.5	WNW	Bedroom 3	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	12	SSW	Bedroom 3	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.4	ESE	Bedroom 3	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	8.2	WNW	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	8.4	SSW	Bedroom 2	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.6	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	12.8	WNW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	1	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	1.7	ESE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	11.1	NNE	Kitchen/Living	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	8.7	WNW	Kitchen/Living	Yes	Yes

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	107	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 125mm concrete slab	13.4	Enclosed	R0.0	Carpet
Night 5	FR5 - 125mm concrete slab	7	Enclosed	R0.0	Carpet
Night 6	FR5 - 125mm concrete slab	6.1	Enclosed	R0.0	Tiles
Entry	FR5 - 125mm concrete slab	4.9	Enclosed	R0.0	Tiles
Bath	FR5 - 125mm concrete slab	3.7	Enclosed	R0.0	Tiles
Laundry	FR5 - 125mm concrete slab	2.6	Enclosed	R0.0	Tiles
Bedroom 3	FR5 - 125mm concrete slab	12.9	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 125mm concrete slab	13.8	Enclosed	R0.0	Carpet
Kitchen/Living	FR5 - 125mm concrete slab	48.9	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: Y8KDINLL2G

Date of Certificate: 6 Jun 2019

★ Star rating: 7.3



Building Features

Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 125mm: 125mm Suspended Slab	0.0	medium

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Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: YIU6AOMWJ

Date of Certificate: 6 Jun 2019

★ Star rating: 5.8



Assessor details

Accreditation number: **VIC/BDAV/14/1658**
Name: **Duncan Hope**
Organisation: **Senica Consultancy Group**
Email: **duncan@senica.com.au**
Phone: **61280067784**
Declaration of interest: **Employed by organisation constructing the building**
Software: **FirstRate5: 5.2.10b (3.13)**
AAO: **BDAV**

Overview

Dwelling details

Address: **106, 26 Whistler Street**
Suburb: **MANLY**
State: **NSW** Postcode: **2095**
Type: **New Home** NCC Class: **Class 2**
Lot/DP number: **-** NatHERS climate zone: **56**
Exposure: **suburban**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Insulation: Wall: **As indicated**
Roof: **As indicated**
Floor: **As indicated**
Glazing: **As indicated**
As indicated

Net floor area (m²)

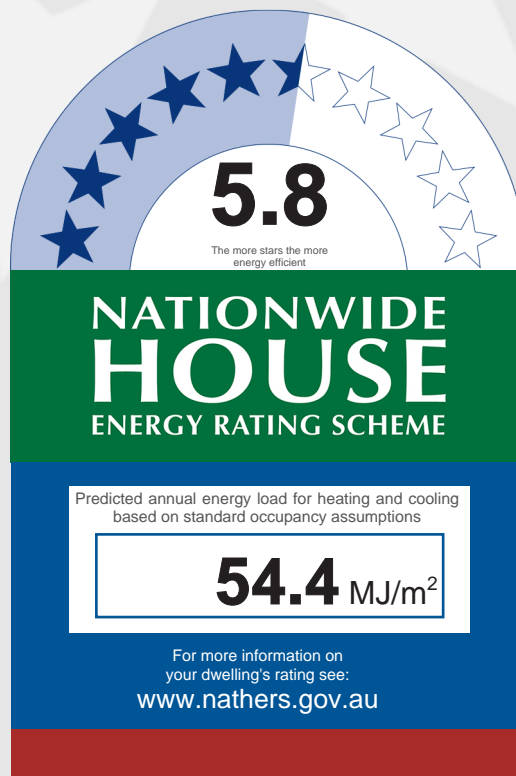
Conditioned: **48.1**
Unconditioned: **3.1**
Garage: **-**
TOTAL: **51.2**

Annual thermal performance loads (MJ/m²)

Heating: **34.7**
Cooling: **19.7**
TOTAL: **54.4**

Plan documents

Plan ref/date: **Project No. 21813**
Prepared by: **Wolski Coppin Architecture**



Ceiling penetrations

(see following pages for details)

Sealed: **0**
Unsealed: **0**
TOTAL:** **0**

Principal downlight type: **Compact fluorescent**

NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: YIUA6AOMWJ

Date of Certificate: 6 Jun 2019

★ Star rating: 5.8



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	21.085SW	2100	850	SSW	Bedroom	No
ALM-002-01 A	21.045FW	2100	448	ESE	Bedroom	No
ALM-002-01 A	21.045FW	2100	421	ESE	Bedroom	No
ALM-002-01 A	21.045FW	2100	450	ESE	Bedroom	No
ALM-002-01 A	Opening 9	2100	2810	ESE	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	2.4	SSW	Bedroom	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.7	ESE	Bedroom	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	8.8	NNE	Bedroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.8	WNW	Bedroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	1.3	NNE	Kitchen/Living	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	20	SSW	Kitchen/Living	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.3	ESE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	6.5	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.3	WNW	Bathroom	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.5	NNE	Bathroom	No	No

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Building Features

1 : AFS - AFS 200mm (75mm Glasswool)	1.3	ESE	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.8	NNE	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5	WNW	Entry	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	0.6	SSW	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	4.1	WNW	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.1	SSW	Entry	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	26.1	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom	FR5 - 125mm concrete slab	11.1	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 125mm concrete slab	31.5	Enclosed	R0.0	Tiles
Bathroom	FR5 - 125mm concrete slab	3.1	Enclosed	R0.0	Tiles
Entry	FR5 - 125mm concrete slab	5.5	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Ceiling fans

Location	Number	Diameter (mm)
----------	--------	---------------

Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 125mm: 125mm Suspended Slab	0.0	medium

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Certificate Number: YIUA6AOMWJ

Date of Certificate: 6 Jun 2019

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: ZOO3BNTV23

Date of Certificate: 6 Jun 2019

★ Star rating: 6.4



Assessor details

Accreditation number: VIC/BDAV/14/1658
Name: Duncan Hope
Organisation: Senica Consultancy Group
Email: duncan@senica.com.au
Phone: 61280067784
Declaration of interest: Employed by organisation constructing the building
Software: FirstRate5: 5.2.10b (3.13)
AAO: BDAV

Overview

Dwelling details

Address: 403, 26 Whistler Street
Suburb: MANLY
State: NSW Postcode: 2095
Type: New Home NCC Class: Class 2
Lot/DP number: - NatHERS climate zone: 56
Exposure: suburban

Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated
Roof: As indicated
Floor: As indicated
Insulation: Wall: As indicated
Roof: As indicated
Floor: As indicated
Glazing: As indicated
As indicated

Net floor area (m²)

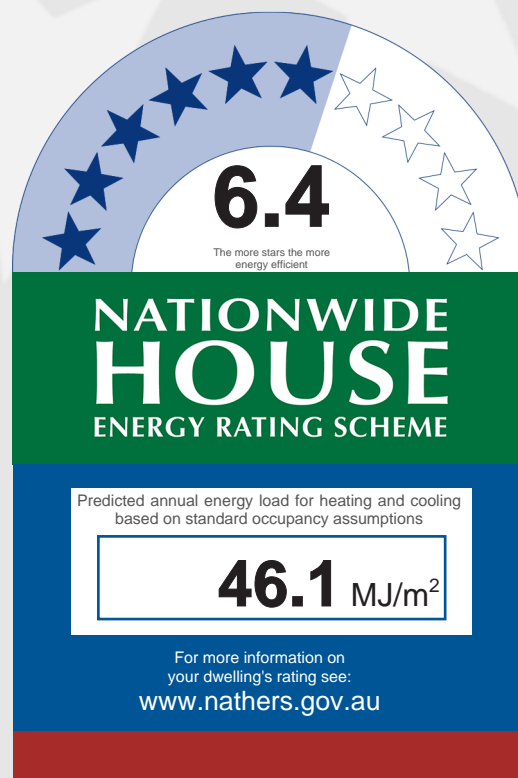
Conditioned: 90
Unconditioned: 3.7
Garage: -
TOTAL: 93.7

Annual thermal performance loads (MJ/m²)

Heating: 24.7
Cooling: 21.4
TOTAL: 46.1

Plan documents

Plan ref/date: Project No. 21813
Prepared by: Wolski Coppin Architecture



Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL:** 0

Principal downlight type: Compact fluorescent

****NOTE:** This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded in construction then this certificate IS NOT VALID and a new certificate is required.** Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Window selection - default windows only

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Nationwide House Energy Rating Scheme* Certificate

Certificate Number: ZOO3BNTV23

Date of Certificate: 6 Jun 2019

★ Star rating: 6.4



Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear	6.7	0.7

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
ALM-002-01 A	bed 1	2100	2400	WNW	Bedroom 1	No
ALM-002-01 A	bed 2	2100	1600	SSW	Bedroom 2	No
ALM-002-01 A	study	2100	900	SSW	study	No
ALM-002-01 A	balcony	2100	3000	WNW	Kitchen/Living	No
ALM-002-01 A	living	2100	450	NNE	Kitchen/Living	No
ALM-002-01 A	dining	2100	2800	WNW	Kitchen/Living	No
ALM-002-01 A	Opening 27	2100	316	WNW	Kitchen/Living	No
ALM-002-01 A	Opening 28	2100	363	SSW	Kitchen/Living	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
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Roof window and skylight schedule

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/diffuser
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External wall type

Type	Insulation	Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)	No
2 : FR5 - Internal Plasterboard Stud Wall		No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	9.8	NNE	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.3	WNW	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	6	SSW	Bedroom 2	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	8.6	ESE	Bedroom 2	No	Yes
2 : FR5 - Internal Plasterboard Stud Wall	0.7	NNE	Bedroom 2	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.8	SSW	study	No	No

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Date of Certificate: **6 Jun 2019**

★ Star rating: **6.4**



Building Features

1 : AFS - AFS 162mm (75mm Glasswool)	7.3	ESE	study	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.7	NNE	ensuite	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.2	NNE	laundry	No	No
2 : FR5 - Internal Plasterboard Stud Wall	0.7	SSW	bath	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.5	ESE	bath	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.8	NNE	bath	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	ESE	entry	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	8.3	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	2.6	NNE	Kitchen/Living	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	8.2	WNW	Kitchen/Living	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	2	SSW	Kitchen/Living	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	1.3	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	12	SSW	Kitchen/Living	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	77.8	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 150mm concrete slab Lined	13.6	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 150mm concrete slab Lined	10.5	Enclosed	R0.0	Carpet
study	FR5 - 150mm concrete slab Lined	10.3	Enclosed	R0.0	Carpet
ensuite	FR5 - 150mm concrete slab Lined	3.8	Enclosed	R0.0	Tiles
laundry	FR5 - 150mm concrete slab Lined	2.5	Enclosed	R0.0	Tiles
bath	FR5 - 150mm concrete slab Lined	3.7	Enclosed	R0.0	Tiles
entry	FR5 - 150mm concrete slab Lined	7.6	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 150mm concrete slab Lined	41.7	Enclosed	R0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
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Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
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Building Features

Ceiling fans

Location	Number	Diameter (mm)
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Roof type

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

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Additional information

Explanatory notes

About this report

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

General Information

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

Accredited Assessors

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

Disclaimer

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

Contact

For more information on the Nationwide House Energy Rating Scheme (NatHERS), visit www.nathers.gov.au

For more information on energy efficient design and insulation visit www.yourhome.gov.au